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**The Row Over the Minneapolis Survey**

*George A. Works and A. V. Overn*

**Military Control Undesirable**

*Arthur B. Moehlman*

**HIGHER PAY for Teachers**

*Harry N. Rosenfield*

**Soviet Schools Today .....** *Harriet Moore*

**Does Modern Design Cost Less?**

*Ralph E. Hacker*

*24 Original Articles, 10 Regular Features*

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# HEAD

## SALARIES

Eighteen states report from 6 to 25 per cent increases in teachers' pay. (Story on page 58.) Thirty-two state legislatures have considered such a move. (Story on page 56.)

Behind these salary drives are O.W.I.'s estimate of a 75,000 teacher shortage for 1943-44. Other than salary adjustments will have to be made. (Story on page 56.)

To obtain higher pay and better opportunities teachers can shift jobs, despite the job stabilization directive of W.M.C. (Story on page 44.)

## JEHOVAH'S WITNESSES

Children cannot be expelled from school or otherwise punished for failure to salute the flag. The U. S. Supreme Court reversed its previous decision and has declared such a practice a violation of the Bill of Rights. (Story on page 56.)

## W.P.B.

You can now file PD-200-c for school construction projects costing less than \$10,000, if no federal funds are involved, and save yourself trouble. PD-200-c is much, much simpler than PD-200, which you can still file if you want to. (Story on page 58.)

Schoolroom stoves may be shipped; domestic stoves cannot.

And if you want repair parts for pencil sharpeners, take pen in hand and plead with the Consumers Durable Goods Branch, advises the National School Service Institute, which can't seem to get these parts released. (Story on page 59.)

## WAR NURSERIES

A new bill (S. 1130) would place child care centers, war nurseries and the whole program for children of working mothers out of the Federal Works Agency and into the more experienced hands of the Children's Bureau, U. S. Office of Education and the Federal Security Agency. (Story on page 57.)

# LINES

Meanwhile F.W.A. reports, on June 12, that 2932 war nurseries and child care centers have been established under Lanhan Act funds. (Story on page 57.)

## SCHOOL LUNCHES

Calling the school feeding situation acute, the Connecticut Association of Boards of Education has asked the O.P.A. to make an immediate upward revision and adjustment of food allotments for all school lunch and child care programs.

## TYPICAL AMERICANS

Supt. Worth McClure of Seattle, president of the A.A.S.A., will probably be one of the "typical Americans" to visit Britain soon. Frederick Reder of the Progressive Education Association has already gone. President Clarence A. Dykstra of the University of Wisconsin has been invited, as has Mark Starr, educational director of the International Ladies Garment Workers Union.

## FALL ENROLLMENTS

Colleges are registering the largest freshman class in years, as parents wish sons and daughters to get at least a semester in college before taking a war job or entering the armed services.

Professors' teaching schedules are being stepped up from an average of twelve hours a week to twenty or more. Free periods and evenings go for boning up on technical information for the new military courses.

Enrollment in women's colleges will be higher than in years also, for many parents do not like the idea of their daughters attending a "militarized college."

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# Questions

## — AND ANSWERS —

### Deferring Teachers

Question: What can be done to keep draft boards from forcing into military service teachers of vocational, agricultural, physical education and industrial arts, of whom there is an acute shortage? It must be borne in mind that Nazism was sold as a religion to the school children and not to adults. Unless something is done to curb the wholesale induction of teachers the schools will suffer a complete collapse.—G.M.H., Pa.

ANSWER: The law places the responsibility upon the local draft boards. They are supposed to be able to recognize the importance of various occupational services and to understand the value of keeping the schools open. They have authority to defer any teacher who, in their opinion, is more valuable in his present occupation than as a soldier.

To guide the local draft boards the selective service system has issued Activity and Occupation Bulletin No. 33-5 (formerly known as Occupational Bulletin No. 23). This gives to superintendents and school boards a full opportunity to press for the deferment of teachers in critical fields. There is no authority for anyone in Washington to go beyond this unless the particular case comes up to the President on appeal from the state appeal board.—W. W. CHARTERS, Office for Emergency Management, War Manpower Commission.

### Junior High Pre-Inducts

Question: In order that junior high schools, in districts where there are no senior high schools, may furnish the utmost service to the war effort, what pre-induction courses can be added that will be on the junior high level?—G.M.H., Pa.

ANSWER: Both junior and senior high schools in our district have experimented with the possibility of pre-induction courses in aeroplanes and mathematics.—WILL C. CRAWFORD.

### Who May Ride School Buses?

Question: Are patrons permitted to ride on school buses when they do not overcrowd the buses? Does the gas rationing program affect this practice? Also, would the school be liable in case of accident and injury to a patron who is not a pupil or teacher?—J.B.B., Tex.

ANSWER: These questions might call for different answers in different states. In most states patrons are not authorized to ride on district-owned buses.

Gas rationing regulations authorize transportation certificates only for school pupils and teachers en route between their homes and school. This would

seem to preclude any other transportation of persons.

Schools do not generally accept liability for personal or property injury to school children and certainly would not accept such liability for patrons.—N. E. VILES.

### What About Library Study?

Question: What is the general opinion among small school superintendents as to the advisability of using the study hall-library combination?—W.J.H., Tex.

ANSWER: The library self-directed study plan is used in a number of large cities and in smaller systems. No general opinion has been collected from small district superintendents or high school principals. The principal objection to date has come from professional librarians. This plan requires a larger expenditure for reference and other books. In our opinion, this is a decidedly favorable factor.—A. B. M.

### Diplomas for Pupils in Service

Question: Is it advisable to extend credits and give diplomas to seniors who quit at midyear to go into Army or Navy service?—L.A.B., Colo.

ANSWER: No. In the Washington schools any boy who has completed the second six weeks' rating period in the last semester, who has the approval of all his teachers and has creditable marks, and who leaves any time after the second rating period may be given his diploma provided he goes directly to camp. Diplomas are not given to boys who are spending their time doing nothing and waiting their orders.—CARROLL R. REED.

### "Advance Notice" Clause Legal

Question: Is it legal to put in a contract that teachers forfeit a part of their last pay check if they quit during a school year less than a day's notice?—L.A.B., Colo.

ANSWER: Yes, it is, apart from any statutory or tenure provisions. Unless the statutes restrict the contract powers of the school board, there is freedom of negotiation between the parties. Both parties to the teaching contract, the teacher as well as the school board, are liable for unwarranted breach of contract.

There can be no legal question as to the propriety of a *reasonable* contract clause requiring advance notice for termination of the contract and establishing in advance the amount of damages for failure to give such notice. However,

for the clause to be valid, the amount of such damages must be definite and reasonable.

Furthermore, to avoid certain technical doctrines of law frowning upon "forfeits" and "penalties," it would be better to regard the clause as one for "liquidated damages," or the amount of damages for breach of contract agreed upon by the parties in advance of any breach. In many states, unexcused breach of a contract by a teacher is cause for revocation of that teacher's certificate.—HARRY N. ROSENFIELD.

### Relaxing Requirements for Teaching

Question: Could there be a relaxation of North Central and some state requirements regarding hours required for teaching of certain subject matter?—C.M.T., Neb.

ANSWER: The standards of the North Central Association of Colleges and Secondary Schools relative to teacher preparation on the secondary level are regarded in most educational circles as minimum standards. Many institutions expect a greater number of hours of preparation in subject matter fields than is required by the association.

Fifteen hours of academic preparation as a prerequisite for teaching in a field does not represent any great amount of preparation on the part of a teacher. It may be that, during the national emergency, certain exceptions will be necessary; certainly the North Central Association wishes to cooperate to the fullest extent in the promotion of our war effort. However, I feel that a permanent relaxation in minimum standards would not be advisable from the standpoint of either the teachers or the pupils who will be expected to benefit from the instruction.—WILLIAM E. McVEY.

### Rubber Marks Come Off

Question: How can rubber marks be removed from gymnasium floors?—D.L.W., Mich.

ANSWER: Rubber marks can usually be removed with a solvent such as benzene, naphtha or gasoline; even turpentine will do, though this and other solvents remove the finish coat. With the first group of removers a varnish finish does not suffer.—H. W. SCHMIDT.

### Fewer Teachers, Less Service

Question: How can schools offer an effective physical education program under existing conditions with coaches being called for military service? We lost two physical education men in a week and are somewhat puzzled as to how to carry on the program that we have undertaken.—L.A.S., Kan.

ANSWER: We might as well recognize now as later that if we lose specialized staff members we cannot continue to provide the same high quality of service in our schools. Every school administrator should keep his community and board of education informed on losses in personnel and the difficulties of replacement.—PAUL A. REHMUS.



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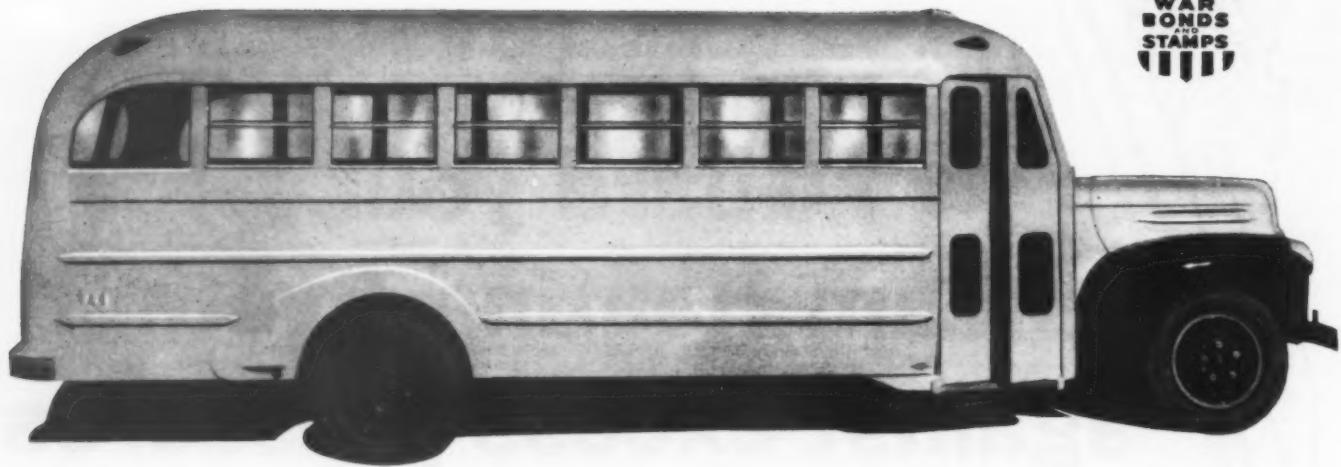
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## LOOKING FORWARD

### Michigan Studies Federal Aid

THE Michigan Public Education Study Commission, a nonpartisan mixed committee including representatives of major state interests, public education and members of the state legislature, is engaged in the development of immediate and long-term plans for the equalization of educational opportunity and the improvement of the schools. Its first report, issued after five months of careful canvass of the total problem, establishes eight principles in terms of which attempts will be made to improve the public schools.

Of special significance to those national pressure groups now attempting direct federal aid through partial payment of teachers' salaries (S.637) should be the commission's clear-cut statement of the need for and dangers of certain types of federal aid to public education. These conclusions are summarized into the following principle:

"The relationship of the federal government to the operation of the education function within the states should be confined to equalizing educational inequalities among the states through subventions for capital improvements and among economically incapable individuals through furnishing essential aid to secure an education; gathering and publishing information on conditions and needs of public education; conducting cooperative research, and furnishing constructive leadership in the development and improvement of educational effort."

### Elementary-Secondary Class Size

IN THE not too distant past conventional but unproved ideas about learning in the primary and postprimary years not only countenanced but strongly advocated large elementary school classes with numbers gradually tapering off until they reached extremely small proportions in the upper secondary years. This school of thought also believed that extended general and professional training was not necessary for elementary teachers. School boards and administrators, drawn chiefly from secondary school specialists, oversimplified the problem of elementary learning. To many laymen and professionals, elementary teaching was "merely bringing the kids and text-

books together through the medium of a simply trained teacher."

Significant and gradually accumulating results of research into the highly involved learning process are producing evidence that points in an entirely opposite direction. It is now conceded that elementary education is the most complicated, significant and vital part of the educational process. It may be reasonably assumed that if the proper importance is attached to elementary learning, many of our current problems in secondary and advanced years might be definitely mitigated if not completely avoided.

Many current weaknesses in reading, in arithmetical skills and possibly even in spelling might be overcome at elementary levels by reducing class size to a point at which a teacher actually has time to carry on instruction to meet individual needs. The deeper and more extensively research is carried, the more serious scrutiny is given to size of class. The crude studies of the "twenties" and "thirties" that at best indicated class size to be one of many variables affecting efficiency and at worst dismissed class size as unimportant have done considerable harm. Such studies gave support to "practical administrators" who believed that adding "just one more child" to elementary classes could not be harmful.

When depression pressure demanded economy these surface studies offered additional excuse for greatly increasing elementary class size. Crude research by child accounting personnel drew further highly erroneous cost conclusions from absence and failure. Too many administrators began to feel that size of class was unimportant and also that "sensible economy" demanded automatic promotion, overlooking the fact that instructional efficiency and not the spending or saving of money is the purpose of the schools. A "soft psychology" had a parallel effect on methodology.

Teachers cannot do the impossible. The results of a series of unintelligent practices soon became noticeable. Children were deficient in the skills of communication, thus forcing the upper secondary school and even the college to take time to teach their students the fundamentals of reading and arithmetic. In many of the large state-aid states equalization formulas based on conventional differences in elementary-secondary class size have stimulated increases in elementary class size

because it was profitable to do so. These aid-differentials have been reckoned on conventional or current experience cost differences which tend to disappear as preparation salary schedules bring salaries together, as highly specialized elementary buildings reduce the capital cost difference and as class size is sensibly reduced.

If educators are really serious about increasing the efficiency of elementary instruction, the time has come to recognize the conditions fundamental to improvement. One of these is size of class. There will be no significant general increases in elementary school enrollment for the country as a whole during the next five years. Reduction of elementary class size is possible if developed in terms of a long-time program.

No absolute class size can be assumed for all conditions. In general, 20 to 30 normal children are about all a good teacher can teach efficiently. It is difficult to justify elementary classes larger than secondary school groups. There is already considerable popular acceptance of a 25 to 30 secondary school class. The initial approach might therefore be made in the adjustment of the elementary to the secondary school size and the adoption of uniform class size policies.

Instruction at elementary levels is the most important phase of the entire program. Elementary class size is a vital factor in the efficiency of instruction. The reduction of elementary classes cannot be longer neglected if instructional efficiency is to be improved.

## Plant Division Essential

THE growing importance of the public school plant in federal-state educational relationships really started in 1933. Plant specialists had long considered federal aid in this form as reasonably safe so far as interference with the community instructional program and teaching personnel was concerned. It was similar in character to federal-state aid for roads. There was little doubt that the federal government would dominate construction, but since such control ended with the completion of the building, the local district was still free to *use* the building—and *use* is all important.

Subventions for the physical plant also fitted into federal emergency aids through W.P.A. but even more effectively through P.W.A. With these prospects in mind, the executive committee of the National Advisory Council on School Building Problems presented a memorandum to the commissioner of education in 1933 advocating the creation of a division on school plant and equipment. This recommendation was quietly buried.

In 1936 the executive committee of the National Advisory Council on School Building Problems, after further study of the problem, not only recommended the early establishment of a division of school plant but also strongly advocated the development of a continuing program of long-range planning for school plant needs. Included in this recommendation was

the idea of stimulation of research in building materials, methods and equipment. The commissioner personally recognized the need for the proposed division but intra-office politics quietly and effectively sabotaged the idea.

The joint committee representing the National Council on Schoolhouse Construction, the National Advisory Council on School Building Problems and the National Association of School Business Officials, created by Commissioner John W. Studebaker in 1941, has renewed the 1936 proposal with the added recommendation that immediate action is essential.

With school plant construction ready to become one of the large federal projections at the close of the war as a means of cushioning the adjustment from a war to a peace-time economy, it is of even more vital current importance that the U. S. Commissioner of Education provide for the early carrying out of the school plant specialists' recommendations of 1933, 1936 and 1943.

It seems desirable that the proposed division should be functionally organized in terms of sites, buildings and equipment and made responsible only to the commissioner or the first assistant commissioner. Subordination to a general administrative division will merely provide form without substance and will prevent the division from cooperating effectively with Federal Works Agency or other agencies having a share in postwar subventions. It is the only way in which educational control of the plant can be kept under professional direction. The time for action in organization has been long overdue.

## Community and State Meetings

THE inevitable postponement of national and regional professional gatherings during the war period places additional importance on state, area, community and even building gatherings. Large state meetings will probably face the same fate as national gatherings have faced but there is no reason why emphasis on one and two day area and community gatherings should be curtailed. Professional meetings become of increasing importance in strengthening professional solidarity through consideration of problems currently of vital importance for the protection and improvement of the education function.

Every reasonable effort should be made during the next academic year for periodic area meetings, joint meetings among neighboring school districts and more than usual emphasis on the school building meeting itself as a discussion center. The old-fashioned order-giving type of faculty meeting may well be eliminated and the time devoted to more constructively planned staff gatherings for group discussion of all common problems.

*The Editor*

The NATION'S SCHOOLS

# MILITARY CONTROL

## *Undesirable*

ARTHUR B. MOEHLMAN

**I**N THE American political and administrative scheme of things, responsibility for the planning, carrying on and winning of the war rests with the military establishment under the direction of the President, as titular commander-in-chief, and the Congress.

Similarly, the responsibility for the operation of the nation's economy, the offices of civil government and, above all, the exercise of the education function reside with the people, through their duly elected and appointed officials.

### Barrage Began Back in 1940

When the military establishment makes extended and steady effort to control the general economy, when it reaches eagerly for control of the processes of public and voluntary education and when it attempts to limit adult knowledge by the censorship of news beyond reasonable military needs, it is time to study the possible effects on our democracy.

Occasional propaganda barrages from high Army and Navy officers against secondary schools, colleges and universities were started in 1940. First, they criticized the public schools because all of the graduates were not physically superior and trained to the minute for military service. Next, they made the assertion that graduates of secondary schools and universities were "woefully unprepared in mathematics and sciences." They upheld the rather absurd contention that every boy and girl should be required to take extensive training in mathematics and the sciences, despite the fact that capacity for learning mathematics and science is not coextensive with the total school population. They also sweepingly announced that selectees were deficient in reading, basing their contentions primarily on products of educationally underprivileged states with dual school systems. Physical condition was no longer stressed.

The Surgeon General's reports showing the influence of housing, medical care and food in childhood had burst that balloon.

The military gentlemen next proceeded to soften the institutions of advanced learning, ably assisted by certain university presidents. One of the great disappointments of this war has been the lack of vision, moral courage and leadership exhibited by many of our educational Brahmins.

The arguments against the colleges and universities were: First, Army officials stated freely that universities were merely "slacker refuges." Second, they began to believe their own propaganda and freely admitted that the "country just cannot stand this condition much longer." Third, having established the fact that "these conditions" could not continue, they decided to move in. In this they were aided by the extension of selective service to include the 18 and 19 year olds.

### The Army and Navy Move In

Since Manpower Commissioner Paul V. McNutt did not raise the question of necessity too strongly, although he fought vigorously to retain institutional freedom of teaching and determination of curricular content, the Army and Navy took over.

There was actually no need for this action. American colleges and universities do not need to apologize for their war efforts. They gave their best research specialists freely to all branches of service long before war burst upon us. They foresaw the stepped-up need for technicians and professional specialists and began recruiting campaigns as early as 1939 to overcome depression neglect.

These schools produced the scientific and professional personnel that made American technological advance possible. They have even given the Army and Navy the principal technicians by furnishing graduate

education that the military establishment was not competent to give. Certainly, these schools could not have become suddenly so incompetent as to require direction from military administrators.

Regardless of military propaganda, educational processes cannot be stepped up much. If technical and social competency is essential, the time for producing agronomists, architects, chemists, dentists, doctors, engineers, foresters, pharmacists, physicists and teachers cannot be reduced without reducing competency.

The Association of American Medical Colleges recently stood firmly against any attempt to return medical competence to a pre-First-World-War standard. Other fields of specialization are beginning to raise similar questions. Each arbitrary reduction by military administrators who know little or nothing about the field of specialization represents a great national loss in terminal, technical and social efficiency. The Army must, perforce, be much more interested in training than in education.

### Must Throw Off the Yoke

Professional educators aren't the Rip van Winkles the Army has assumed. They know their fields, the possibilities and limitations of the student body. Each contraction of the general educational program means a dangerous social loss. The argument that the war must first be won is too obvious to require elaboration. However, if we win the war and lose our democratic competency we have lost the purpose of fighting.

Thoughtful Americans may well ponder this expression of the military will to dominate public education. Organization should be immediately established to prevent any inroads into the upper years of secondary education and to throw off completely the yoke of military domination as soon as the fighting is over.



Not too young to be learning radio mechanics in the laboratory of the Children's Club of the Stalin Auto Plant Palace of Culture located in Moscow.

they reach 18, was to include a complete primary and secondary school education.

Primary and secondary school enrollment, which was 32,185,825 in 1939 at the outbreak of the World War II, was expected to reach 36,000,000 for the fall term of 1941, the year of the Nazi invasion of Russia.

Although the war has slowed down this expansion, schools are regarded as organs essential to a nation fighting for its life. The siege of Moscow delayed school openings only a few weeks. Then the full program was carried on as usual.

Whenever possible younger children with their mothers were evacuated from the invaded areas. But, in general, schools with children, teachers and as much of the equipment as could be taken were evacuated as entire units. Parents remained behind to carry on the fight.

Schools continue in their new locations, children living with foster parents or in boarding schools until the war is over and they can be reunited with their families. In cities under siege, as at Leningrad, schools were heated though dwellings were not. Children spent much of their time in the schools where their health was protected by extra rations.

Other war-time emergencies required adjustments. School terms behind the fighting lines were so arranged as to permit children over 14 to help get in the harvests. For this reason the curriculum, too, has been altered to include agricultural training. Other curriculum changes bear the impress of the war emergency. Elementary military training begins at the age of 12, a necessity in war against an enemy who makes war on children, too.

The problem of protecting the children from the brutalities of this war has been faced realistically and handled skillfully. Children are not kept from knowledge of what is going on. They have been taught how to protect themselves.

A Soviet pamphlet of such instruction has reached this country. It explains how to tell direction by

## SOVIET SCHOOLS TODAY

HARRIET MOORE

Assistant Secretary, American Council, Institute of Pacific Relations, New York City

UNTIL the Nazi invasion, compulsory education in the Soviet Union was steadily being extended into higher age groups each year, according to a definite plan that provided for necessary expansion of school building and teacher training.

By 1937, ten year universal compulsory education was introduced for all children from 8 to 18 in towns and industrial settlements. In the village districts, although ten year schooling and college education were reaching ever larger numbers, the universal compulsory program applied only to the first seven years of

schooling (roughly corresponding to our primary school and junior high school course).

In the Soviet plan, 1942 was scheduled to usher in the nation-wide extension of the ten year compulsory education system. In that year the countryside was to catch up with the cities. All its children from 8 to 18, after preschool training in nurseries and kindergartens, were to be enrolled in the 153,718 village schools on the same basis as the city children in their 19,041 schools. The ten year course, beginning with children at the age of 8 and continuing until



Above: Wall newspapers published by the young people in schools and plants are an important means of self-criticism and education. Here we see the editorial staff of a wall newspaper in a Moscow school laying out the next edition.

Below: This war worker operates three machines and at the same time is teaching two trade school pupils attempting to finish their course of practical study ahead of schedule. The scene is at a machine tool engineering works in Soviet Russia.



using a watch and observing the position of the sun; how to hide and not cast a shadow; how to judge distance in reporting the movements of the enemy; how to track an enemy without being observed and how to throw the enemy off one's own track; how to identify planes, and how to use simple weapons. Because of this training Soviet children have played an important rôle in the defense of their country. For boys, the emphasis is on fighting, for girls, on first aid and communications.

How Soviet children use this training has become known here through the stories of children's heroism. But it is not in such heroic action alone that they aid the defense effort. Their readiness and ability to keep things going have released men for the fronts. Together with teachers they take care of the maintenance of the schools and supply services. The school day begins with mop and broom.

#### Teaching Tied In With Defense

The regular curriculum continues, however, in spite of the war. It includes study of the native language and literature, supplemented by the teaching of Russian for the non-Russian nationalities that make up nearly half the population. Mathematics, social science, foreign language, history, geography, art, music and manual training are taught much as in our schools, the chief difference lying, perhaps, in the amount of science given. All children are given nature study, physics, chemistry, geology and mineralogy.

However, all subjects, so far as possible, are tied in with defense. Pupils are being trained in the use of maps and compasses, elementary plan drawing, the taking of measurements. Rudimentary training is given in the handling of optical and telegraphic instruments, knowledge of terrain, ballistics and diesel motors. Basic courses are given in methods of combating poison gases, extinguishing incendiary bombs, fire fighting and knowledge of war explosives.

To build up morale, stress is laid on the study of history, on the exploits of the old Russian heroes and the heroes of the other peoples of the multinational Soviet Union; on their victories in the past against foreign invaders; on the achievements of Soviet science, literature

and art. Physical training has been amplified, particularly in the higher grades. These courses have been allotted more time and now include swimming, rivers, surmounting obstacles, throwing hand grenades, using firearms and bayonets.

Regular classes are supplemented with excursions to factories, farms and museums. This, together with manual training and mechanical drawing, is what is meant by "polytechnization" in Soviet education. Soviet children are thus made familiar with the basic processes underlying all labor. Soviet educators are trying to help the child find his



Typical of the thousands of Soviet youths who have filed applications for service at the front are these two Leningrad university girls who have volunteered for service in an army field ambulance detachment.

chosen vocation early in life. Nor is art education neglected. Even in war time children are given wide opportunities for creative expression.

Technical education in the Soviet Union is being particularly emphasized during this war for so many skilled workers must be replaced. Each year industry is gaining nearly a million new workers from the farms. Rural youths as well as city children, both boys and girls, are learning trades. Those who do not go on to college go to *Tekhnikums*, or technical middle schools.

Two additional new types of technical schools were established in 1940. For children of 14, the industrial

schools now give two year courses in training for work on railroads or in industry as technicians. For older boys of 16, there are six month trade schools that prepare semi-skilled workers for industry. In both schools the young people work at the bench part of the time, receiving half the pay received by adults. Some 700,000 children are enrolled in these schools. Thus new workers know their trades when they start to work.

Vital to the war effort has been the great number of nursery schools. Vastly expanded since 1941, these organizations enable women to replace men in the factories and fields. American correspondents report that today hardly any men are seen in the factories. Women run street cars, buses, trains. They build the planes and tanks, make the shells and guns. Only in this way has the Soviet Union been able to put such a gigantic army in the field.

#### Factories House Nurseries

In 1939 there were 1,800,000 children in permanent nurseries and kindergartens and 5,700,000 in the collective farm seasonal nurseries and kindergartens. Most of these nurseries are located at the factories where the mothers work. Baby nurseries are run by the commissariat of health. Kindergartens for the 3½ to 7 year olds are under the education commissariat. Children come at 7:30 and stay until 5:30. They are bathed, fed and given simple lessons in drawing, numbers and writing. When mothers work at late shift, kindergartens and nurseries keep the children all night.

This brief survey can indicate only the types of school now operating in the Soviet Union. All these schools are public, state run and free through the eighth year of the secondary school (through 14 years). Although a tuition fee was established shortly before the war, except for needy children with good grades, this fee has been largely suspended for the duration. Children of men in the armed forces are exempt from charge and the need of parents is leniently interpreted. Technical middle schools are entirely free and the children who board at them are given free maintenance.

This war has shown how important the school is to the community in winning the war, through caring for and training children.

EACH MONTH A QUESTIONNAIRE IS MAILED TO 500 REPRESENTATIVE SCHOOL ADMINISTRATORS

THE NATION'S SCHOOLS

# SCHOOL OPINION POLL

## Do Pupils Know Their History?

"OUR graduates are *not* well informed about American history and government," says a substantial majority of public school administrators.

The fault rests primarily upon various combinations of curriculum, teachers, teaching methods, textbooks and other considerations, according to this month's *Opinion Poll*. Some superintendents pointed without hesitation to teaching methods or curriculum.

Definite changes in civic education programs are being planned for 1943-44 in many places. A somewhat smaller number of school systems will not alter present programs. Quite a few schoolmen state that, as of early June, they are uncertain about whether to make changes or not.

This month The NATION'S SCHOOLS again sent 500 questionnaires to administrators throughout the country. Returns totaled 25 per cent.

Opinions varied widely on certain considerations. Here's what some of

the country's administrators are thinking—and saying.

A New Yorker asserts: "Too many educators and training institutions have encouraged expression of opinions rather than the gaining of knowledge as a basis of judgment."

"The average high school pupil has adequate factual knowledge of history at the time of graduation. However, these facts seem to slip away as other things are emphasized in the years immediately after graduation," according to an Ohioan.

### South Blames Teachers' Salaries

From Arkansas comes this comment: "If the salaries of teachers were high enough, we would get better qualified history teachers."

And from Idaho: "History should be personalized. It should be and can be a very interesting subject. It is taught too much by the straight textbook method."

One administrator from Iowa remarks: "I think our college students are well posted on American history

and much better posted on current events and current problems than any preceding generation. If the persons responsible for the testing that has caused all the recent furore had been tested in their college days by a similarly constructed test, it is my opinion that they would have done no better.

"Perhaps we need more repetition of history facts through our course of study. However, everyone knows that one may thoroughly master factual material and then forget it within a comparatively short period of time."

Texas speaks: "Teaching is too 'bookish.' We need to educate our students in becoming citizens who recognize their civic responsibilities and who will discharge them as citizens."

In indignation an administrator from Connecticut states: "I, for one, resent the kind of articles that have appeared in the public press of late. They are totally inaccurate and misleading and serve only to hamper educational activities."

### QUESTIONS ASKED AND OPINIONS EXPRESSED

1 Do you think the average high school graduate is sufficiently well informed about American history and government?

#### Opinions

No	60%
Yes	32
Uncertain	5
No Answer	3
Total	100%

2 If pupils' knowledge seems inadequate, where does the fault lie?

#### Opinions

Combined Responsibility	49%
No Answer	25
Teaching Methods	8
Curriculum	8
Teachers	6
Textbooks	4
Total	100%

3 Are you going to make any changes in the civic education program in your school for the year 1943-44?

#### Opinions

Yes	39%
No	32
Uncertain	23
No Answer	6
Total	100%

# That Minneapolis SURVEY

## SURVEY EXPLAINED

GEORGE A. WORKS

Professor Emeritus of Education, University of Chicago, and Director of the Survey

THE survey of the Minneapolis public schools was an outgrowth of a threatened strike on the part of the members of the janitorial-engineering force of the school system. This action was threatened because of the fear that wages for the year 1941-42 would not be paid according to schedule—a condition that had existed in several preceding years. Governor Stassen came to the assistance of the board of education with funds from the treasury of the state that made it possible to avert the strike.

### Not a Complete Study

As one of the conditions of granting financial assistance, Governor Stassen stipulated that provision should be made for a survey of the city's schools, to be paid for by funds from the state. At no time was this survey envisaged as a complete study of the school system. Emphasis was placed primarily on problems affecting the financing and the administering of the schools.

A striking revelation concerned the utilization of the school plant. For more than a quarter of a century Minneapolis has been working toward a 6-3-3 organization of its schools. At the time the survey was started all but approximately 2500 of the seventh, eighth and ninth grade pupils were in junior high schools. Examination revealed that about half of these pupils could be cared for in existing junior high schools of the city. It was recommended that those who could be so accommodated be transferred from the elementary schools of which they were a part.

Financially significant was the failure of the board of education to adjust its use of elementary school buildings to the changes of the last

decade in the number of pupils. A loss of 14,289 pupils—practically all in the elementary school—had occurred from 1931 to March 1942. During this period the number of buildings used was decreased by only one although at least a part of the situation was known to the board of education. The survey report recommended the closing of 21 elementary school buildings.

Acceptance of this recommendation and the preceding one would have (1) saved at least \$180,000 annually, (2) reduced by 50 per cent the number of seventh, eighth and ninth grade pupils housed in elementary buildings and (3) provided better housing for pupils as a whole as the schools to be closed were for the most part housed in the poorest buildings.

The board did take action, closing 16 elementary school buildings.

An aggregate reduction of \$8,987,151 was made by the board of education in salaries of teachers and wages of employees from 1932 to 1941, inclusive. This meant an average of about a million dollars a year. The range in the amount of the deductions was from \$80,000 in 1935 to \$1,750,000 in 1933. During a part of that decade there was need for rigid economy. That it is not a one-sided issue is evident in that this burden fell on the 3500 persons constituting the school staff. The contributions of this group over the ten year period amounted to nearly 15 per cent of the local tax contributions to the schools.

### Alleged Shortcomings of Board

A review of the actions of board members showed that not only had they kept more buildings open than were needed for the children of Minneapolis and balanced the budget by

salary and wage deductions but they were at fault in such matters as the following:

1. They substituted their judgment as laymen on professional issues for that of the members of the staff of the school system.

2. Some of them revealed an erroneous conception of their relationship to the schools by endeavoring to obtain a salary of \$3000 for board members.

3. Much time was spent in board meetings considering details about the day-to-day work of the schools that should have been handled by the professional staff. As a result, little time was devoted to such vital issues as the selection of a new superintendent.

4. At least one member of the board failed to realize the impropriety of his soliciting funds from teachers and principals for movements in which he was interested.

### Asks That Board Be Appointed

These are only a few illustratives that could be supplied. All in all, the situation was so bad that the recommendation was made that legislation be secured abolishing the present board of education and that there be substituted for it a board appointed by the mayor on the recommendation of the mayor's committee on education.

That such a procedure has its disadvantages is recognized by the following statement taken from the foreword to the report:

"In the portion of the report dealing with the administration of the schools, it will be found that the recommendations call for marked departures from the usual administrative procedures. In the judgment of the staff the conditions that obtained in the schools were such that adherence to the conventional patterns of administration was a minor consideration in comparison with the importance of securing a break with the present practices and giving the community an opportunity to start anew on the solution of its school problems."

# "The Big School Fight of the Decade"

## SCHOOL BULLETIN

MINNEAPOLIS PUBLIC SCHOOLS

SPECIAL SURVEY ISSUE

1943-44

### Local School Officials Solve Their Own Financial, Educational Problems

#### Minneapolis School Board Represents Every Walk of Life

*Elected from the People, of the People, by the People*

A QUESTIONNAIRE SENT TO PROMINENT EDUCATORS IN A SURVEY TO ESTABLISH THE REQUIREMENTS FOR AN IDEAL BOARD DEVELOPED THE FOLLOWING STANDARDS:

1. A typical school board must be elected by the direct vote of the people. The schools are the most precious possession of the people and should be constantly subject to the will of the people through the ballot. Schools dominated by a major appointed board have become the football of the worst kind of corrupt politics. In Chicago and New York, where this form of government exists, the mayor is the real board and superintendent of schools regardless of his experience or training.

2. The board must be elected at large. (True in Minneapolis).

3. Not too large, five is the desirable number. (There are seven on the board in Minneapolis, the governor wants eleven appointed by the mayor).

4. It is desirable to have only one member of the board retire each year so as to maintain continuity of policy. (This idea is followed in Minneapolis. Two will retire or come up for re-election next spring. Thus, it is possible for the people to change the complexion of the board at close intervals. The people have had

that opportunity at different intervals during the last 10 years).

The defeated school board candidates who talk so much about the "confidence" of the people have never been in the confidence of the people sufficiently to be elected. Reasoning in the inverse order, they delude themselves with the thought that the people voted for their successful opponents because of a lack of confidence in those successful opponents.

If you were to make a study of the typical democratic American school board, you would find it composed of a doctor, lawyer, educator, business men and representatives of labor. That description fits the Minneapolis Board to perfection. The defeated and disgruntled candidates resent this democratic assembly. They feel that they can elect the mayor and secure a 100% appointive board of their own kind.

As Dr. Works said, it's a desperate measure. Now in desperation, these malcontents seek to destroy our American form of government while our boys are fighting and dying for the preservation of such a representative government.

#### Chicago Survey Firm Makes A Dangerous Recommendation

Would Throw Entire School System Into Financial Morass; Outsiders Tend to Undo Excellent Job Performed by New Administration and Reorganized School Board

##### 1. GOVERNOR'S SURVEY "TOO POLITICAL AND TOO LATE"

After long months of waiting, the governor's survey report has arrived from Chicago. Its original intent was to aid the Board of Education in solving a financial problem that had plagued the city of Minneapolis for many years. The survey recommended a deficit of \$8,925,000 which were taken in the form of salary cuts by the employees of the Board. These continual cuts had gradually, over a period of ten years, built up antagonism on the part of the personnel. These pent-up feelings finally exploded into the form of strike votes and marked the high point of a smoldering resentment. Such situations existed recently in Seattle, Wash., St. Joseph, Mo., Gary, Ind., Rankin, Pa., and Hamtramck, Mich., where school employees are threatening strikes.

##### 2. SCHOOLS FACED WITH DEFICIT OF \$1,029,000 IN 1942-43, CLEARED UP BY NEW ADMINISTRATION AND NEWLY ORGANIZED BOARD.

The school board, in its conferences with the governor, agreed to pay full salaries to all of its employees and started that program on Jan. 1, 1942, thereby facing a deficit of \$1,029,000 for the year or a deficit of \$5,000 a day, which procedure would soon close the schools for lack of funds.

3. Original purpose of survey committee to help solve the financial problem. It did very little, but has done much to harm.

It was to help us in this dilemma that the governor hired a survey committee. Not getting any assistance from them, the new administration and the newly organized school board set to make its own survey and apply remedial remedies. This proved to be so successful that we were able to balance the budget on June 5.

We heard from the survey committee the first time when they corroborated the superintendent's program of closing 22 half empty buildings, a program which had been started in December by holding nu-

merous meetings and developing data involving the closing of each building.

##### 4. AT LONG LAST, THE SURVEY APPEARS AFTER MANY MONTHS OF DELAY, AFTER THE DIFFICULT PROBLEM WAS SOLVED, TO SERVE A POLITICAL PURPOSE, NOT TO HELP.

Months have passed since that, during which time we solved our problem, but still the survey committee sat in session full for the first time in ten years and were well on the road to a new, constructive survey. We learned that the survey that the governor had been doing something about his \$15,000 survey. Rumors were flying around that the survey was the survey of the survey. Political influences behind the survey were very much disturbed that financial problems had been settled as well as the school government or educational point of attack.

We then learned that the report was

Continued on page 8

groups considerably more influence than they deserve in the choice of school board members. It would enable a minority to defy the will of the majority. The selection of school board members at large, by ballot, in nonpolitical elections, is the accepted method now used in the majority of the best-managed school districts.

The survey builds arguments to justify a preference for a type of total city government under the central control of the mayor. The control of schools is confused with that of the sanitary, highway, fire, police and other service departments of the city government. The mayor is assumed to possess better educational judgment when it comes to the selection of school board members than the electorate which chose him.

#### Elected Board Has Independence

The unification of all functions of city government under unit control by the mayor has not been the general practice in the United States. The supreme court of Minnesota has recognized the principle that school government should be separated from other functions of government for greater efficiency in the specific task of education. The delegation of the authority for education to an elected school board has developed slowly but consistently through 300 years of experience.

The survey's suggestion here is foreign to the trend and spirit of this developed experience. Experience in the United States has shown that boards which do not have this independence of action have not been as successful in sensing the educational aspirations of the public as have independent boards.

On page 17 the survey states that one of its purposes is to determine "the reasons for the widespread lack of confidence in the board of education." Although incidents are drawn from the school board records of past years to demonstrate this alleged lack of confidence, there is no indication of an objective examination of the current situation that may have led to the conclusion drawn. Six of the

## SURVEY ATTACKED

### A. V. OVERN

Professor of Education, University of North Dakota, and Author of Survey Critique

THE statement is made in the foreword of the published report of the survey of Minneapolis schools that "in the judgment of the staff the conditions that obtained in the schools were such that adherence to the conventional patterns of administration was a minor consideration in comparison with the importance of securing a break with the present practices."

The present board of education consists of seven members elected at large. The survey suggests a new board of 11 members chosen by the

mayor from candidates suggested to him by a committee on education. This committee would consist of 21 members, also appointed by the mayor to represent the organized and unorganized group interests of the community. Thus, the proposed cure for the alleged mistakes of a democratic form of school government is to take away from the people their right to determine by ballot what individuals best represent them in school matters.

That is a political type of organization that could give small pressure

## CRITIQUE BRIEF

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seven board members now are serving beyond their first terms and were reelected with substantial majorities.

The survey here gives the impression of entertaining a bias against the school board. The bias is so strong that the discouraged survey staff asks that the democratic school board organization of Minneapolis be abolished and that a much more political type of organization be substituted for it. The bias is so strong, in fact, that the survey omits all mention of its obvious knowledge that for more than a year Minneapolis has had a courageous superintendent. He has united the sentiments of the members of the school board and has led them successfully to correct many of the evils for which the system was blamed before he took office.

#### Opposes Divided Responsibility

A number of technical recommendations are made, with many of which I disagree in my published critique of the printed report. I feel that some of these recommendations disregard important problems of the Minneapolis schools. The crying need in Minneapolis was to conserve the general fund in ways that did not detract from the adequacy of the educational services given to the boys and girls. For greater economy and efficiency, the superintendent was working to simplify his overhead organization and make controls direct.

Disregarding this objective, the survey recommends the creation of new offices for assistant superintendents and directors, thus dividing administrative responsibility instead of uniting it. The estimated cost of the new offices suggested would be about \$20,000 per year.

The survey suggests a traditional type of line organization that makes both administration and supervision matters of line authority. In my critique, I recommend emphasis upon the staff organization, with a simplified line organization to allow direct control through the superintendent's office.

The survey recommends an assistant superintendent in charge of special services; a director of finance, with greatly enlarged duties over those now performed by the accountant; an administrative director of personnel, and a director of research and information (an administrative officer). In contradiction I recommend that the preparation of details concerning special services should be the duty of a staff officer who already does most of that work, and the administration should be through the superintendent's office.

I suggest adding the details of budget preparation to the duties of the accountant and leaving the other business affairs in the business department where they are now. Thus, the new director of finance would

not be necessary. I also suggest that the director of personnel should be a staff officer who would prepare matters for the approval of the superintendent and that this person should have no administrative authority except over his own assistants. I see no need for a new administrative officer in charge of research and the dissemination of information. The research department now is in the staff, not in the line.

The dissemination of information to the public is one of the most powerful means known for exercising educational leadership in the community. A wise superintendent will not let that function go out of his own hands. The research officer should send no official information out of his office except over the signature of the superintendent.

#### Purchasing Is Schools' Function

The survey recognizes a certain inefficiency in the routing of purchases through the city purchasing agent; it recommends that, whenever there are indications that this agent is not rendering satisfactory service to the board, the latter should consider such reports and present them to the city council for action. I propose a more direct method of purchasing school supplies and equipment through the school board office directly, where 40 per cent of all purchases are made now.

# We used to practice our ETHICS

*Then politics pushed in and the present "personality regime" began in which glamour covers up faculty lacks in scholarship, efficiency and personal integrity*

MARGARET J. SYNNBERG

Teacher, McKinley High School, Chicago

AT ONE time most normal schools offered a course called "Ethics" to furnish prospective teachers with a professional code of conduct.

In the memory of most of us there was a rigid teaching code—an unwritten formula of thou shalt and thou shalt not, of do this and do not do that—which, when followed, maintained a modicum of peaceful working efficiency in educational institutions.

Today, largely because of the inroads of political influence into school systems, educators' ethics is either undergoing a metamorphosis or quietly disappearing from our national life. With alarming frequency certain unwholesome phenomena are recurring. The settings change; the casts of characters are different, yet, essentially, reports are the same: the appointment of unqualified administrators, unfair promotions, the retention of incompetent employes for extraneous reasons, the placing of poorly qualified applicants, the questionable examinations, the increasing ratio between school employes and relatives prominent in political life.

## Personality, Hollywood Type

Whenever persons in any walk of life are thrown together by force or circumstance, there must be some common denominator of association. Formerly, in school situations professional training, ethical standards and cultural background provided this denominator. But today, with unearned promotions, unfortunate appointments and the incompetence of inexperienced workers to be reck-

oned with, a new denominator must be furnished. Among a group of persons some of whom are without much training, some without too much academic knowledge, some without experience or efficiency in their work, what common denominator of association will serve?

The answer introduces the new common denominator of education, personality. Not the outmoded Benjamin Franklin ideal—far from it. Personality, as interpreted currently, is a reflection of the Hollywood influence, suave, agreeable, flattering, uninhibited, adaptable to all situations, orthodox and otherwise.

## Inadequacy No Longer Embarrassing

Needless to say, a pleasant manner is an asset in the teaching profession but an agreeable approach never was and never will be a substitute for successful production, skill, efficiency, scholarship or integrity of character.

Of course it was an excellent innovation to insert a "personality" clause into the technic of teacher examinations. Perhaps the profession did need glamour, charm, poise, sweetness and a readier smile. Maybe the comic valentine model of an old-fashioned instructor, male or female, was too true to reality for complacency. Possibly there was an urgent need for a new mobile factor to route certain candidates safely through difficult academic tests. But regardless of what brought about the present situation, personality is today a factor with which to reckon.

Under a personality regime inadequacy never becomes really embarrassing. For personality puts every-

one on a delightfully social, democratic footing. Everyone in the school, from the principal to the newest sweeper, can be reduced to his or her respective ratio to the common denominator. In such a situation, criticism, even of the most glaring errors or omissions, is a cardinal transgression, unkind, ill-bred, inconsiderate and most damaging to the esprit de corps.

Normally, most high school faculties present a wide range of ages. Ethics of the teaching profession once required that experience, training and mature wisdom be accorded due support and deference.

In the past it was usually conceded that although a person might be unable to run up three flights of stairs in ten seconds flat, he might, nevertheless, be eminently qualified to train an orchestra, coach a play or organize teaching schedules. Today mature experience may even be a handicap. The high standards of competence and the more flexible attainments of the more gracious employe are often incompatible.

## Capable Persons Ridiculed

To compensate for disappearing academic interests a new spirit of socialization has descended upon a goodly number of high school faculties. Unfortunately, however, middle-aged men and women, although still desirable for the less glamorous duties of school operation, are not always attractive party appurtenances. More and more frequently it happens that dignified older teachers are acutely embarrassed by their failure to measure up to the social accom-

plishments of newer teachers' integrated personalities.

Formerly, adverse criticism of fellow teachers was barred, at least under certain conditions. But professional incompetency has occasional need of balm for the hurt of inferiority. Hence, there is the growing sport of making capable persons a little, not too openly, ludicrous. A bald head or artificial teeth, while not exactly the fulfillment of one's secret ambition, may grace a brilliant executive or a skilled scientist. Unfortunately, the weapon of personal ridicule has been legitimized for school use. New and interesting targets are always available.

Imperceptibly, many administrators have become accustomed to the prevalence of personal gossip and in unfortunate instances have even succumbed to its fascination. It is an understandable weakness to seek support when one feels uncertain of

decisions and judgments. Frankly speaking, it is no longer a serious breach of professional ethics for administrators to discuss confidential school matters with teachers, clerks, janitors, matrons, window washers or sweepers.

Another bit of evidence of the weakening of the old ethical code is the growing custom among administrators of reproving subordinates in the presence of others. Obviously vicious as this practice is, it is doubtful if in this year of 1943 one experienced high school teacher can be located who has not at some time or other been subjected to this type of humiliation.

As the ethics of a profession is lowered it becomes increasingly difficult to believe in the inherent nobility of that profession. Once there was something almost apostolic about teaching, something that made instructing the slow, the ill-favored,

the handicapped, the underprivileged a high service. Unfortunately, there are many teachers today who boast of their shrewdness in avoiding school drudgery, in obtaining easier places at the expense of some faithful worker whose old-fashioned principles make her too loyal to complain.

To replace the vanishing ethics of the teaching profession some schools have introduced the "big happy family" idea of operation. A politician's ideal, it is most certainly an administrator's nightmare. Calling teachers by their given names, devising charming little epithets to emphasize individual strong or weak points, back slapping, giving birthday parties to keep superiors in good humor are not designed for those who must deal with the immature and hold respect while doing it. When professional barriers are once down they tend to remain down, to everyone's discomfiture.

Can the morale of any educational institution long survive the breakdown of the ethical standards of its faculty? Unequivocally, no! To be successful, teachers must be reasonably expansive, demonstrative, free to express themselves. In every good school there must be latitude for professional individuality. Unless there is reasonable immunity from destructive criticism for employes, any school system will eventually sacrifice the greatest single asset in its possession, the magnetic influence of human personality.

#### "Are Educators Fools—?"

It is stupid to take strength for granted. Somewhere in every strong structure there is iron, steel, cement or some other element of sturdy support. Somewhere in every worthwhile school there must be firmness, solidity, rock-like qualities that can withstand ordinary vicissitudes. These marks of true worth must be the fruit of human integrity and never can they be stronger than those who forge them.

At no time in the history of America was it more necessary to hold fast to our ideals. Are educators fools that they sacrifice, even in the least part, the traditions of their profession, the qualities that once were inseparable from it—integrity, loyalty, honesty, courage, conscientiousness, devotion to duty—in exchange for a mess of political pottage?

## Our Job After the War

**LT. GEORGE TRIAL**

Quartermaster Corps, Army of the United States

IT IS becoming increasingly evident in this ever shrinking time-distance world that lawful national desires of all countries must be harmonized with the advantages of a world-wide organization of industry and trade.

Such a reconciliation demands that future generations be educated in a citizenship that extends from home to neighborhood and from nationality to humanity.

Both Germany and Japan have a single purpose: world domination and slavery. Their method of carrying out this single purpose is to condition the minds of boys and girls by sending them through carefully controlled schools.

Governments everywhere seek control of the educational processes by which the complete and complex social heritage is transmitted to oncoming generations. The majority of governments, however, control these processes in the proper manner.

Our government should always be cognizant of ideals, theories and systems being taught in the schools of other countries. Keeping abreast of these things would give us an

opportunity to destroy anything contrary to the ideals of the Atlantic Charter as it applies to all the world.

From the foregoing it seems reasonable that Comparative Education should be offered as a required subject in all teacher training institutions of the United States. The reasons for such a course of study would be:

1. Historical background of all foreign education and its relation to the state.
2. Interpretation of present trends of society in the light of the trends of education in the past.
3. The effect of education on the evolution of democracy.
4. The effects of the dictator states on the education of all countries.

When the last shot of this war has been fired it will be the duty of the United Nations to take action in some form of international education to rid Hitler Youth of its phoney ideology, and in addition—and probably this will be the greatest job—to set up by some form of education a different philosophy for the entire Japanese population, or what's left of it.

# Pointers from PARENTS

CARL WITT, Principal Junior High School, Albert Lea, Minn.

EDUCATION and the schools are not a part of the average citizen's daily consideration. The result is an indifferent attitude on the part of the general public, the remedy for which is to give the parents an active part in the constructive thinking of your school.

Schools can lead the thinking instead of merely being a mirror of public opinion. Progressive ideas may be sold to the public through good publicity in the newspapers, on the radio, presentations at parent-teacher associations and service organizations, bulletins to the home, school publications, exhibits and readable reports. There are additional procedures necessary to make education responsive to the requirements of the people.

## Albert Lea Parents Questioned

The junior high school at Albert Lea, Minn., has given the patrons, all of them, a sense of having a direct part, a responsibility and a "feeling of worth" in building the schools. The accompanying questionnaire was sent to the homes. Pupils were checked in the home-rooms on their ratings in "responsibility" to see that answers were returned. You can make a questionnaire that meets your specific needs.

Results were tabulated and made public through the mediums previously suggested. Remedial procedures were carried out when they were considered necessary.

Invitations to the next P.T.A. meeting carried the survey results, announcing that 4.6 per cent of the parents had reported too much homework for pupils, 4.6 per cent thought there was not enough, 33 1/3 per cent thought the amount was right and 55.3 per cent did not consider the question significant enough to answer.

One mother said that Mary spent too much time on homework. Additional guidance was given in arranging her study schedule.

Robert's parents thought he spent too much time on homework and condemned the entire school for

## JUNIOR HIGH SCHOOL QUESTIONNAIRE

To the Parents of \_\_\_\_\_

You have been selected as one who might give us helpful information for improving the work of the school. Your comments will be held strictly confidential except as they may be used in general statistics. Please be frank in making suggestions.

How many minutes does your child, named above, spend daily in home work? \_\_\_\_\_

Does this seem reasonable to you? \_\_\_\_\_

Please state the items and cost of materials purchased in preparation for school.

1. \_\_\_\_\_ 5. \_\_\_\_\_

2. \_\_\_\_\_ 6. \_\_\_\_\_

3. \_\_\_\_\_ 7. \_\_\_\_\_

4. \_\_\_\_\_ Total \_\_\_\_\_

Do you consider this reasonable? \_\_\_\_\_

How many times a year do you usually visit school? \_\_\_\_\_

Do you attend parent-teacher association meetings? \_\_\_\_\_

In what way could the school be of greater service? \_\_\_\_\_

Are there any things unusually well done which you care to mention? \_\_\_\_\_

Are the report cards more helpful than those formerly used? \_\_\_\_\_

Use the back of this sheet for additional comments. Please return this report to the Junior High School office.

what they considered a general fault. We informed them of the opinions of other parents as shown in the questionnaire. Robert's problem then became an individual case and was solved by his homeroom teacher.

If costs of school materials are high, there may be ways of reducing them. John misrepresented the amounts he required for supplies and spent the extra money on frivolities.

Another parent thought the home economics department educated pupils to use expensive methods and foods in meal preparation. Facts showed a well-directed plan of consumer education. The costs of certain

well-balanced meals were shown to be less than those of many quickly prepared starchy meals that leave a person undernourished, "pepless" and susceptible to disease.

In addition, constructive suggestions from the parents resulted in a revised report card.

Just as preventive medicine teaches periodic health examinations, so a little attention to the school body, even though it is healthy, will prevent the high fevers and community rash that may break out to hamper a good school program. A good suggestion made by a parent and acted upon by the school will provide an interested cooperative supporter.

# Summer Day Camp

## One Community's Attack on Rising Juvenile Delinquency

OUR schools are the only social service agencies with physical facilities that can be put into immediate operation for the care and welfare of children whose mothers are employed.

As administrators, school board members and teachers we may as well plan for the fullest use of our school plants to combat the juvenile delinquency problem. To convert these facilities for extended use, most school districts are not in a good financial position. It is up to school leadership to present the problem to our communities, state and federal governments in an effort to obtain the necessary funds.

### We Made a Quick Survey

At Midlothian, Ill., we first sensed the growing employment situation among mothers by the increased number of children who began bringing lunches to school. Our building has no lunchroom facilities.

Last November, after staff discussions, we decided to make a quick survey of the situation. Without advance announcement, one morning the teachers interviewed individually each child whose mother was employed.

In our elementary school building 283 families are represented; 86 children came from homes in which the mother was employed at that time. Of the 86 children, 41 reported that nobody was responsible for them while their mothers were at work and that they were spending two hours and forty-five minutes alone daily. Twenty children had younger brothers and sisters under their care.

Only 14 of the 86 children admitted to having been in trouble that could have been avoided if the parent had been at home. The misdemeanors reported did not seem too

**JOHN S. BENBEN**

Superintendent of Schools  
Midlothian, Ill.

serious. However, what the situation might develop into as more and more mothers became employed, we could not foresee.

Armed with the results of this preliminary survey we went to the various service groups of the community and they began to see what the problem was and how quickly it might develop as the need for women in war industry, the pressure of higher living costs, the lure of high wages and the preparation for a possible postwar depression began to take hold on the minds of housewives and mothers.

Once alert, the community began to notice how many mothers were itching to go to work and were prevented only by inadequate provisions for the care of their children.

Our argument was that no amount of scolding, expostulating or reasoning with these mothers would keep them at home. The appeal, patriotic and economic, is too great. As a school community we might as well face the situation and be prepared to extend school facilities to meet the problem.

### Our After-School Program Helps

We already had an extended school program of recreation, consisting of dancing, games and scout work for late afternoon and evening hours, supervised by teachers and volunteers. This is a distinct help with the present problem for our program was well established.

We asked for suggestions from community groups and the following proposals came from study committees, service clubs and from the chil-

dren: (1) establishment of a nursery school; (2) plans for a preschool group; (3) establishment of a school lunch program; (4) the organization of nonworking mothers to care for the children of working mothers; (5) a summer day camp, and (6) extension of the after-school program.

### We Start Plans for Camp

The first three suggestions were eliminated because of lack of available housing and no one showed sufficient interest or faith in the fourth. That left the summer day camp and the further extension of after-school services. The parents showed enthusiastic interest in these two suggestions.

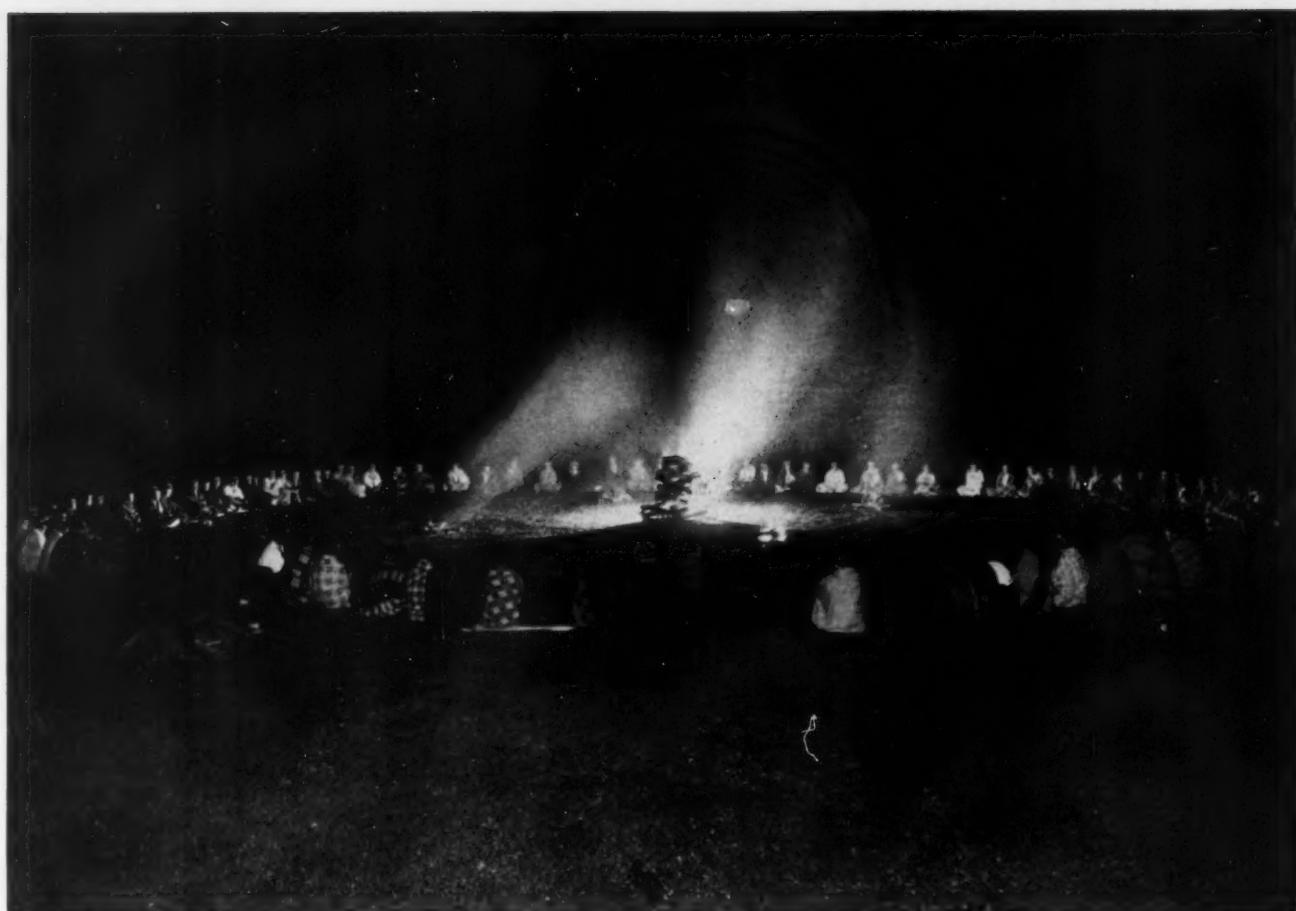
Our newly made plans for the summer day camp are as follows: It will be under the supervision of members of the teaching staff who have organized the project.

Unless the enrollment is too small, we shall retain our entire teaching staff for the summer. In the event of limited enrollment, we shall keep only the teachers who are specialists in arts and crafts, dramatics, physical education, nature study, music and the primary grades.

The school district cannot underwrite the project financially so the plan is to charge \$1.50 a week to meet the staff's salaries. A scaled rate will be charged families that have more than one child participating.

An optimum of outdoor activities is planned. The children will be grouped by age and placed under the supervision of a staff member with the assistance of a junior councilor.

The junior councilors are to be recruited from the sixth, seventh and eighth grades and from high school boys and girls who have an aptitude



Chicago Normal School of Physical Education

Several evenings around a campfire will be permitted the older children. In fact, each group will plan its own afternoon activities and overnight hikes.

for leadership and the ability to handle children. Most of these youngsters will come from a group that has had leadership training in our school.

It is planned to open the camp at 9:30 a.m. and to dismiss the children at 3:30 p.m., Mondays through Fridays; the children will bring their own lunches.

In the staff discussions two suggested programs were presented: (1) to center the entire project around arts and crafts, nature study, physical education, dramatics, music and orchestra and (2) to have each group, under the supervision of a councilor, plan its own activities throughout the entire summer, using the school as a base of operation.

The staff has decided upon a combination of these two plans. It has been agreed that from 9:30 until 11:45 a.m. activities will be conducted in one hour sessions, permitting groups to choose their own fields of interest for a period of one week. Activities will be under the supervision of a qualified teacher. The time from 11:45 a.m. until 1 p.m.

will be used for cleaning up, lunch and rest.

From 1 o'clock until 3:30 or later the activities of each group will be planned by its members. Children can avail themselves of the many recreation facilities of near-by Chicago, the county forest preserves and the community swimming pool. Each group will plan its own afternoon activities for the week.

A likely afternoon schedule would be: Monday, swimming; Tuesday, nature study field trip and baseball; Wednesday, a trip to a Chicago museum and a swim in lake; Thursday, swimming, twilight hike and wiener roast; Friday, an overnight hike.

Afternoon activities will include bicycle trips, twilight sings at the camp site, mixed baseball games, track events, baseball meets. We are sure that the youngsters are capable of planning their own activities and, with a little direction, will find more than enough to do. Expenses of the afternoon trips must be met by the youngsters.

Activities of the children of primary school age will be planned by

the teacher and junior councilor to include visits to the zoo, nature study trips, picnics and wading.

Our search for facilities for overnight hikes led us to the Midlothian Country Club, situated a short distance away. Members of the club's board were approached for permission to use a 40 acre tract on which tents might be erected for the summer. The availability of this wooded section would eliminate any of the undesirable factors found in the more frequented county preserves and would give us the added protection and aid of the club watchman and the near-by district station of the state police.

This, then, is our plan for our first summer day camp.

School people have often complained about being handicapped by boards and by pressure groups in their attempts to extend school services. Now we have the opportunity. Who will dare, in this time of war and increasing child delinquency, to block any proposal to aid the nation in its present effort to continue our way of life!

*The pulps are the pupils' first choice,  
Miss Sennberg demonstrated last month.  
This article gives some reasons why—*

## *Our English Teaching Must Be Wrong*

ENGLISH as a subject has not been well taught. Examination of the reading and writing skills and literary appreciations of our public school graduates fills even teachers of the subject with dismay. Observation of English classes, compared with those in more technical subjects, reveals confusion in aims and a peculiar laxness in teaching technic.

### **Why They Read Trash**

All too often teachers take the easy way by browsing through their own literary interests and evading the glaring needs of their pupils because written and oral expression is hard and boring to teach. When youngsters are forced to deaden their real reading interests in a masterpiece that, because of ignorance of its background, archaic wordage and tedious style, is too complex for their mental level, is it any wonder that they shun further free reading of that type and find relaxation and amazing interest in what so many of us consider trash?

Why is it that even college seniors find written expression difficult and do it cumbersomely? One must be hard-shelled, indeed, and skilled in tongue-in-cheek mouthing to say without blushing that the average high school graduate has really mastered English as expected after twelve years of schooling in its use.

This preliminary vociferousness on my part brings me to the purpose of this article, that is, to point out that English teachers generally have forgotten the aims of an English course. First things have too often been put off until now we are hard pressed to defend our work. Taxpayers and even youths are demanding results. The only way we can give them their money's worth in English instruction is to realize fundamental reasons for teaching them the subject.

In my opinion, the development of the power to *understand* what is read is of prime importance. The

**ALLAN MATHIAS PITKANEN**

building of good reading habits comes next—habits that will stay for a lifetime. These must be mastered before appreciation and other allied activity mean much. These certainly are more vital than professional drilling on the intricacies of types of literature, the dates and inconsequential minutiae of poets' lives, the romantic and philosophical meanderings of the masters about whose true meanings even the teachers quibble.

### **Must Get Significance of Thought**

Our purpose is not to minimize the reading of the masterpieces, but common sense should tell us that the habit of reading worth-while books cannot be established before the ability to understand the written word and something of life itself has been acquired. It is foolish to read literature one cannot comprehend just because it is the cultural thing to do. Reading poetry just for the sound effects or for the word sound is ridiculous if the thought-provocative meanings are not considered. Addicts of this sort of teaching would do well to think through an indictment of them in Lewis Carroll's "Jabberwocky" and in Robert Louis Stevenson's "Beggars."

Feminine dabblers in the literary arts are more guilty of teaching poetry for the mere sound elements in it and the reaction from most adolescents is what can be expected under this tutelage—a kind of frothy, unintelligent appreciation. The defense, they say, for such exercise is that the analysis of the meaning is too "unpoetic" and, of course, too difficult for the youngsters. Beauty

of the music of poetry is esthetically important, yes, and a part of one's appreciation. But if that is all that is emphasized in the study, the pleasure of reading poetry is not of a high order if it is not combined with that which comes from the beauty or significance of the thought or emotion in it.

By assuming that high school pupils have already learned to read with intelligence, many teachers are led astray to flounder later in depths of literary interpretation that dampen all well-motivated enthusiasm. It must be realized that public schools cater to wide ranges of mentality and cultural backgrounds. Even pupils in the higher levels of training have trouble in grasping the general meaning of a page of words in one reading; they often fail to carry through the meanings of single sentences and know their relationship to the rest of the paragraph. Most of them are blank about the deeper significances and implications of mature expression, that which lies beneath the surface of words, between the lines. In these literature units skillful teaching is imperative. Understanding must come first or a pupil's desire to read in his leisure time is definitely diminished.

### **Shakespeare Dissected**

The mention of Shakespeare usually brings a horselaugh from former English pupils because the teacher, thinking the right approach was being made, placed too much emphasis on word study, what so-and-so said such-and-such a word meant, details of the text and long tiresome memorization drills of passages holding little meaning for the pupils.

## LOOK OUT FOR THESE SIGNS OF POOR TEACHING

### IN YOUR TEACHERS

Assumption that pupils have already learned to read with intelligence

High speed driving through classics

Too much emphasis on word study, tedious detail, long memorization drills

Poetry reading for sound effects rather than understanding

No special attention to slower pupils

### IN YOUR PUPILS

Vocabulary trouble

Word-to-word hopping

Failure to grasp the meanings of paragraphs or to catch implications of mature expression

Faulty appreciation of poetry

Mind on airplanes or hog raising

to interpret sentences in the light of the context because his one-track mind is too engrossed with mechanics, airplanes or hog raising. In bringing culture to the masses, many must be dragged to appreciation. These stolid people must be aroused to see values in literature and then trained to hold their minds on the printed page, to get the general drift of a passage in mind and interpret new thoughts according to what has already been read.

Without careful explanation the purposes of satire and irony fall on barren soil and Johnnie, in his innocence and seriousness, wonders who is daft. Too often he never gets below the surface meanings until his teacher hints that something different is meant there.

### Goals Often Too Ambitious

In their hurry to cover everything of importance from Beowulf to Conrad, from John Smith to Sandburg, enthusiastic teachers drive English groups at such top speed that the entire scene of literary knowledge is as blurred as is a landscape seen from a flying train. Speed is necessary in order to reach ambitious goals but foolish, too, if pupils cannot visualize fast enough to know what ideals and information have been presented. More explanation, more interpretation, simpler, more descriptive picture-words are vital for proper understanding on the part of the slower pupils.

Most selections commonly studied in high school English courses are too deep, too subtle for the maturity of the would-be appreciators. If they do not always get the spiritual balm that is the teacher's, time will cure that failing, just so long as interest has been aroused. The subtlety of passages read must not kill enthusiasm by being kept meaningless.

Above all, the teacher should remember Anatole France's opinion of books: "Every masterpiece of literature is a different book to every reader of it, and a different book to the same reader in different moods or at different ages."

Many of us went through that sort of drill and God only knows how we still managed to love literature! The victory for the Bard would have been won if first the general meaning of the play had been presented in the dramatic way it was intended. Too bad so many English teachers make such miserable actors! College students, as well, dread English courses in which they are forced into a professional concentration on textual detail instead of getting a firsthand chance to appreciate the stimulation of great minds under guidance of experts.

### More Than Lecture and Readings

Teaching that drives from it those who hunger to know and cherish cannot be considered good. The urge to scholarship is commendable but high school teaching of literature, especially, must have a broader aim and method; it should not be merely a lecture-reading affair.

Imagination and largeness of view, as well as the superb skill of instilling a thorough, scholarly attitude in the pupils without warping their interest, must be demanded of the teacher. The effective guide will not comment on or question every detail of a literary selection but will choose for discussion those that are especially significant. He will make the detail illuminate the larger theme or make the theme give greater significance to the detail but will not isolate one from the other. Besides achieving plain understanding, Masefield's comment is to be remembered, too, that in order to get the most from the experience, reading must give recreation and cheer, guidance and consolation.

You may ask, "Why don't pupils understand what they read?" The answer is simply that they have vocabulary trouble. Words are just words to them. One unfamiliar word may make a whole sentence meaningless. Obvious as it is, many teachers forget that. Yes, keep the dictionary handy, but pupils first should be taught to try to infer the meaning from the context and to try to guess it from its roots. To do this, study of prefixes, suffixes and word derivation is prerequisite to intelligent reading. Pupils do not run to dictionaries for every difficult word and do not get the dictionary habit without special training. That is possible only when plenty of dictionaries are handy, when pupils know how to use them and have frequent word tests on assigned reading.

Failure to understand words comes also from not knowing sentence structure. Special study of inverted word order, syntax and grammatical relationships, therefore, is necessary even though such study is dreaded. But, with right preparation and spirit on the part of the instructor, even these apparently lifeless procedures can be made interesting.

### Culture to the Masses

Many dullards never get their assigned reading, not so much because they are dumb but because they never catch up with the class. Slow readers must be weaned from their word-to-word hopping and trained to read in thought groups. In this way their reading can be speeded up. Where this cannot be done pupils should have their eyes examined.

The reader with a normal I.Q., serious as he may be, fails repeatedly

# Survival in Combat

## *enhanced by effective pre-induction training*



Prepared at the request of The NATION'S SCHOOLS by the

**CIVILIAN PRE-INDUCTION TRAINING BRANCH**

**INDUSTRIAL PERSONNEL DIVISION**

**ARMY SERVICE FORCES**

sary and it was for that reason that the Civilian Pre-Induction Training Branch was established by the War Department.

Through the cooperation of the U. S. Office of Education primary needs were made known to the schools. That this service was welcomed is witnessed by the enthusiasm and seriousness of purpose with which pre-induction training programs have been initiated throughout the country.

With the flow into the Army of young men with no trade or vocational experience, the need for pre-induction training has greatly in-

SCHOOLS began readjusting to meet the demands of a nation at war many months before Pearl Harbor. Emphasis within the curriculum moved in the direction of the sciences and mathematics. The threat to democracy's existence brought into sharpened perspective the necessity of stressing American history and the problems of democracy. Physical fitness programs tended to follow the example set by the growing Army.

When war broke with sudden violence on Dec. 7, 1941, clarification of educational aims became an immediate necessity. Schools wanted to be used to maximum efficiency in defeating our enemies. They needed definition of the ways in which they could best serve their country.

A primary facet of the problem was the question, "How can we best prepare our boys in school for the fighting forces?" There were many answers but there was no authoritative voice. Clarification was neces-

Nine out of ten men in the Army are specialists. An urgent need is for pre-induction training in airplane mechanics. All illustrations are official Signal Corps jobs.



Some 86,000 boys now in school are studying the fundamentals of radio in order to operate and maintain such equipment as this portable transmitter and receiver after they are inducted into the armed forces.

creased. There are 610 jobs in the Army that require specialized training beyond the usual basic training. Of these jobs 297 have counterparts in civilian occupations and the re-training of men who entered the armed forces from these jobs was not difficult. The situation is different with the inexperienced young man. Unless preliminary training could be given in the schools, the full burden would be thrown on the Army. Valuable time would be wasted and much needed facilities taxed.

For this reason the problem of discovering the essential needs of the Army for pre-induction training was approached by careful analysis to discover which skills were essential to the greatest number of Army jobs. This analysis of a complex problem indicated that a knowledge of the fundamentals of electricity contributes to 151 occupations in the Army; a knowledge of machines, to 226 occupations; shopwork, to 188; radio, to 35, and automotive mechanics, to 50.

Consequently, the first statements issued to the schools were outlines based on actual Army needs for pre-vocational training in these fundamental areas. Official War Department pre-induction training manuals were prepared and distributed to

schools throughout the nation in December 1942 in cooperation with the U. S. Office of Education. These concerned the fundamentals of electricity, machines, shopwork, radio and automotive mechanics. Recent pre-induction training outlines have been issued in two other fields important to the Army—driver education and Army clerical procedures.\*

The Army is not interested only in the skills of its men. Certain needs for pre-induction training apply alike to all potential inductees. Every American soldier should (1) understand that this is his fight, (2) understand the nature of military life, (3) be able to speak and write simply and clearly, (4) be able to compute with assurance and skill, (5) be physically fit to fight and know how to take proper care of himself.

Pre-induction training can meet these needs through orientation courses on Army life, through special units in English and the social studies, through special programs in health, hygiene and physical education and through refresher and remedial courses in English and mathematics. A general bulletin on the ways in which pre-induction training

\*Army Clerical Procedures, published in Education for Victory, March 15, 1943.

programs in these as well as in pre-vocational areas can be initiated and developed is now in preparation.

Further materials in the vocational field are also being prepared. A bulletin for vocational schools, vocational departments and trade schools will shortly be published, followed by supplementary bulletins in such areas as aircraft mechanics, automobile mechanics, radio, telephone and telegraph and machine shop practice.

The scope of the Army pre-induction training program, as evidenced by the variety of needs which it expresses, is Army-wide. The Civilian Pre-Induction Training Branch of the Army Service Forces is best described as a coordinating agency for the expression of Army needs to the civilian training agencies of the nation. Facts about Army needs are collected, analyzed and defined in civilian terms. In order to do this the services of both military men and civilian educators are employed.

This branch of Army service goes straight to the camps where post-induction training is given to men after their basic training. Reports from the battlefronts are studied in the light of training needs. The service examines the procedures of induction, classification and assignment of inductees and the problems



These soldiers at the Ordnance Training Center, Aberdeen, Md., are learning how to maintain a radial tank engine. Pre-induction training in automotive mechanics saves valuable time after induction in Army.

of utilization of skills acquired prior to induction into the Army.

Both military and civilian approaches to the problem are of equal importance. For that reason the staff of the Civilian Pre-Induction Training Branch is divided between Army officers and civilians. Men have been

selected because they represent various types of civilian training agencies and various postinduction training schools. There are specialists on the staff in the following educational fields: curriculum planning, scientific and technical curriculum, research analysis, text materials, visual

aids, adult education, independent schools, public school systems, colleges, junior colleges, vocational schools, educational publication, teacher training, education in industry and business and educational finance. In addition to this, the organization avails itself of the services of expert consultants in various specialized areas, such as mathematics, languages, health, social studies and the sciences.

Two methods are used for introducing the pre-induction training programs to the schools. The U. S. Office of Education has worked closely with the War Department in the preparation of materials and has been the principal channeling agency for making these materials available to the schools. In addition, the branch maintains a staff of officers assigned to represent the War Department for the purpose of advising civilian agencies on the initiation and development of pre-induction training programs.

#### Motto for Army Training

The most recent figures received from chief state school officers indicate that the acceptance of pre-induction training in the schools has been extensive. At this writing there are nearly 600,000 enrollments in courses in the fundamentals of electricity, shopwork, machines, radio and automotive mechanics. More than 60,000 boys are learning radio code; almost a million are taking special pre-induction physical fitness courses; 200,000 are enrolled in pre-induction aeronautics, and more than 300,000 are enrolled in physics courses emphasizing special contributions to Army needs.

Not only does this important training in the schools mean more efficient soldiers, it means that lives will be saved. The more extensive the training of men before they enter the Army, the more effective will be their postinduction training. It is the trained man who has the greatest possibility of survival in combat.

There is an Army training motto that is indelibly impressed on all Army men engaged in this vital function. It applies equally to those who have the responsibility for pre-induction training. It is this: *Be damn sure that no American soldier is ever killed or wounded because YOU failed to do YOUR part to provide him with adequate training.*

## The Right Kind of Teaching

JOE GLENN COSS

Instructor, Sanger Union High School, Sanger, Calif.

HERE are two kinds of teaching: one based on the principle that the teacher receives the material that the pupil has learned and the other based on the principle that the teacher gives of his knowledge to his pupils.

The usual routine of the receiving technic is something like the following: The teacher assigns the lesson in the text and sometimes reviews briefly the new assignment.

The following day or when the assignment is due the pupils are asked to recite on the material studied or are asked questions about it. Those pupils who understand the lesson or for other reasons are capable of answering recite. The remainder sit passively or reply with the usual: "I don't know." The teacher then grades the pupils on their replies. The responding ones pass and the passive ones fail as the case may be. The lesson has proceeded according to plan and a new assignment is given.

The "giver," on the other hand, usually follows the same procedure up to a certain point and then the difference becomes apparent.

When the giver asks for a recitation or requires an answer to a question, he is merely determining the degree of comprehension on the part of the pupil. If the pupil answers satisfactorily the teacher is pleased, but if the pupil answers unsatisfactorily or not at all the teacher immediately determines whether there are others who do not understand.

If the lack of understanding is general, the giver goes into action. He realizes that something is not clear—the text, his own explanation or some word. He stops his routine

immediately and clears up the difficulty. He uses frequent tests to assure himself that his pupils understand. In other words, he *teaches*. When he is sure that his pupils understand, he proceeds as usual.

The difference between the two technics lies in an attitude concerning the function of the teacher. The "receiver" feels that the text should do the teaching and his task is to discover whether the pupils have studied; whereas the "giver" feels that the text is only an aid and that the teaching should be done by the teacher.

In the early history of education the teacher was a learned man around whom gathered many disciples to share his wisdom. There were few texts and the learned man was definitely a giver.

Now, however, the text has become a teaching institution and our mass educational system would flounder miserably without it. Unfortunately, few texts are written that can be understood by everyone. It then becomes the duty of the teacher to give of his knowledge to clarify the text.

One of our functions is to impart knowledge to all pupils in accordance with their aptitudes and abilities. If we pass over the pupil who does not understand, we assuredly are failing in our duty.

While it is true that a few pupils should not detain the many, it is equally true that the teacher should not neglect the few when a little "giving" in the form of explanation or demonstration might save them. Perhaps a little self-evaluation in this respect might not injure the quality of our teaching and might even improve instruction, as such.

# How to Throttle Opposition to SCHOOL COSTS

ARVID J. BURKE

Director of Studies, New York State Teachers Association

## Part II

THE first article in this series outlined some of the major problems and conflicts arising from public school spending. This month I shall summarize some of the facts required to solve these problems and to reduce these conflicts.

It is not possible in a short article to present all of the facts needed for understanding defensible spending for public schools and for interpreting defensible spending to the public.\* However, this discussion will deal briefly with four basic types of information: (1) facts on total governmental spending, (2) facts on increased expenditures for public schools, (3) facts on variations in expenditure levels for public schools among states and communities and (4) facts on returns from money spent.

### Comparison Is Unfair

Since many of the conflicts over public school spending are the result of total governmental spending and taxation, it is important that educators have the facts on governmental spending in general. Taxpayers and taxpayers' organizations often are critical of public school spending because they think that it represents the largest or one of the largest categories of public expenditures.

The foregoing impression arises from the limitations of our statistics on governmental spending. The classification of expenditures is one of the foremost of these limitations. Education usually is considered in a class by itself as are general administration, debt service, protection, health, welfare services and many other categories. Such classifications fail to take into account the many purposes that are served by a function like education, such as health, safety and conservation of property. It would be much more appropriate to compare education with total expenditures for other purposes rather than with some category like health or recreation.

The second major limitation is the overlapping of government units of

service. The approximate total expenditures for public education in all units of government are reported regularly. However, the total costs of protection, general administration, welfare and most other government services are not reported. For example, there are no statistics on the total cost of police protection for towns, counties, villages, cities, states and the federal government. As a result, in most comparisons the approximate total cost of education is compared with the partial cost of other government services.

### Accounting Not Uniform

The third limitation is the fact that the statistics for various services performed by more than one unit of government are not generally available because of lack of uniform accounting and reporting, variations in fiscal years and variations in classifications of expenditures. Estimates of total expenditures for various governmental purposes for the year 1938 show the following to be true: 13 per cent of the taxes paid by the American people was spent by the school authorities to promote health, citizenship, economic competence, conservation of natural resources, worthy use of leisure, home and family life, protection of persons and property, character and personality development, mastery of the tools of learning, command of basic subject matter and ability to think. Another 80 per cent of the taxes was spent by other units of government to promote the same purposes with much

less emphasis upon the last four. Another 7 per cent was spent for debt service for past expenditures on these purposes made with borrowed money.

There are many other facts about governmental spending with which educators should be familiar. They should know how the federal government has replaced local government as the major taxing unit in the last twenty years, the implications of federal spending for state and local tax systems, the problems growing out of overlapping taxing units and the implications of these for public school spending.

In explaining increased expenditures for public schools, educators have relied chiefly upon attendance data, changes in educational offerings and the purchasing power of the school dollar. These facts only partially explain the rise in the cost of education.

### Reflects Rise in Living Standards

The standards of living of teachers and other school employees have followed the general upward trend of all living standards as measured by per capita income and consumer expenditures. Especially significant has been the changed economic status of women. Since most teachers are women this trend has had a considerable influence upon public school expenditures. My studies show that next to changes in attendance, the change in living standards is the most important factor in explaining the rise of school expenditures over a long period of time, much more important than changes in the purchasing power of the dollar.

From 1870 to 1930, the average expenditure per pupil per day for public education increased 425 per cent. About a third of this increase was



\*I have made a fairly extensive compilation of these facts in my book, *Defensible Spending for Public Schools*.

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## WRITE FOR YOUR VOLUME INDEX

If you bind your volumes of *The Nation's Schools* you will want the index to Volume 31, covering issues from January through June 1943. War-time paper rationing prevents its publication in the magazine. Send requests to 919 N. Michigan, Chicago 11.

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due to changes in program; about half was due to changes in living standards, especially the changed status of women, and the remainder was due to changes in the purchasing power of money.

Other important facts to keep in mind in explaining increased expenditures are the causes of increased attendance, the changing nature of the school population and the increasing urbanism of the country.

### To Correct a Misunderstanding

Misunderstandings regarding the meaning of variations in per pupil expenditures for public schools have been a constant source of conflict in public school spending. Educators, generally, have assumed that differences in expenditure levels mean differences in educational opportunities. Taxpayers, generally, have assumed that such variations mean differences in the cost of the same education. Misunderstanding can be corrected by concentrating attention upon the major variables: first, those that make the same education cost more in one place than in another and, second, those that make for educational inequalities.

Major factors that make the same education cost more in one place than in another include geographic conditions, price differentials, sparsity of population and governmental structure. Geographic conditions include such factors as climate. In a warm climate schools not only have lower plant operation costs but can save on personnel costs because living is less expensive.

Even in the absence of geographic

factors affecting costs, there are variations in the prices of the same goods and services resulting from economic conditions. In New York State the same goods and services purchased by teachers showed a price variation of nearly 40 per cent. A nation-wide study of a selected group of cities showed a 23 per cent variation. Urbanism and higher prices for the same goods and services tend to go together. They are important in understanding the high expenditure levels for schools, government and almost everything else in New York, California, New Jersey, Massachusetts, Delaware and Connecticut.

### Costs Rise in Remote Areas

Sparsity of population increases school expenditure levels because of the cost of transportation, reduced pupil-teacher ratios and the increased costs of certain goods and services, such as fuel. Sparsity is an important factor in explaining the high expenditure levels of Arizona, Wyoming and Nevada. Small units of government have the same effects as sparsity, especially in densely populated areas. This factor is operating in states like New York, Michigan and Illinois.

The per cent of the differences in per pupil expenditures for schools resulting from geographic, economic, population and governmental factors that make the same education cost more in one place than in another will vary depending upon the states or communities compared. Few cases will be found in which more than a third of the variations can be explained by these factors alone.

Closely related to price factors are differences in living standards. There are communities in New York State in which the average monthly rental is more than \$150 a month as contrasted with less than \$10 a month in others. In 1940 the average monthly rental in Arkansas was \$12 as compared with \$40 in New York. These differences reflect not only differences in the cost of living at the same standard but also differences in prevailing living standards. It simply is not possible to live below a certain standard in certain communities and states. This factor increases costs but apparently has compensating effects upon educational returns. Where teachers can live at higher standards, there generally seems to be education of a high quality.

It is probably true that most of the differences in expenditure levels, when averages and not individual school systems are compared, are due to differences in educational opportunities. The evidence gathered to date seems to support this assumption but operational efficiency should not be ignored. Nor should it be assumed that more money alone will assure better educational opportunities.

### Is Long-Term Investment

Public school spending represents the investment of one generation in succeeding generations. Individual, social and economic returns accrue gradually. What we observe today is the result of past spending, not of current spending. Facts on returns for money spent, therefore, are difficult to obtain. Yet there are certain fundamentals that should be generally understood. Here are a few generalizations elaborated in my book:

1. Attainment of the objectives of public education is necessary for the survival of any civilization, nation, government or economy.
2. The survival of a democracy and a private enterprise economy, both of which place great responsibility upon the individual, requires that each individual be educated to his maximum capacity.
3. The achievement of almost universal literacy in this generation has more than compensated for the investment of previous generations in public education.
4. The attainment of consumer intelligence and skill in future generations can more than pay for the present investment in public education.

# HIGHER PAY for Teachers

*will help keep them on the job;  
bills up in 32 state legislatures*

HARRY N. ROSENFIELD

Principal Attorney  
Federal Security Agency

*Because of the war emergency many teachers are leaving the schools of Arkansas to accept other positions because of more attractive salaries; thus, it is hereby declared that the educational interests of the children of the state of Arkansas can best be served by increasing the salaries and qualifications of teachers. . . .*

In other states legislative action is still pending.<sup>3</sup> For example, in Nebraska and Ohio, salary increases have been granted locally by individual school districts without reliance on special state-wide legislation.

Salary legislation during this current legislative session has taken three forms, although as is to be expected in some states more than one form was utilized. Eleven states granted direct salary raises. Eight others, four of which also relied on direct salary raises, legislated on minimum salaries. Four states, while not specifically legislating increased salaries, have made available additional state-aid funds. For the most part such funds have been specifically designated for teachers' salary increases.

## Direct Increases

Two states legislated a flat increase to all teachers. West Virginia gave a \$25 monthly raise through providing additional state aid specifically earmarked for this purpose.<sup>4</sup> Washington appropriated state aid providing up to \$90 in addition to contract

<sup>3</sup>Arkansas, S.B. 91, § 15, approved March 2, 1943.

<sup>4</sup>In Massachusetts and Pennsylvania, as well as the District of Columbia, for example, final action had not yet been taken, as of this writing, on bills sponsored by teacher groups. (Mass., H.B. 798; Penn., H.B. 933; Dist. of Col., S. 18).

<sup>5</sup>West Virginia, S.B. No. 82.

salaries to be distributed by the state superintendent to school districts for teachers who were full-time employes in the three month period prior to passage of the act.

A prorated amount was allowed to each part-time employe not to exceed \$1.50 per day for each day taught during a three month period.<sup>5</sup> Washington also appropriated an additional \$7,600,000 of state aid in addition to all other funds, at least 80 per cent of which must be used to increase salaries of teachers and other employes. Additional funds were appropriated to assure maintenance of a minimum state standard.<sup>6</sup> The result, according to the state superintendent, will be a general increase of more than \$200 per teacher.<sup>7</sup>

## Graduated Increases

Delaware granted additions to basic salaries with a ceiling of \$3000, teachers earning salaries of between \$500 and \$1200 being given an increase of \$120 per year, those earning between \$1200 and \$1500, \$150 a year and those whose salaries ranged between \$1500 and \$3000, \$180 a year.<sup>8</sup>

Arkansas increased state aid for teachers by categories, from \$320 to \$480 for teachers with less than one year of college, from \$400 to \$560 for those with three year elementary certificates, from \$480 to \$640 for those holding four year or junior high school certificates and from \$600 to \$800 for persons having high school and six year certificates. Arkansas also set an \$880 contribution for certificates based on master degrees, allotted increased state aid

<sup>6</sup>Washington, H. 146.

<sup>7</sup>Washington, H. 167.

<sup>8</sup>See Washington Education Journal 22:156 (April) 1943.

<sup>9</sup>Delaware, H.B. No. 32.

for administrative purposes and earmarked an increase in the necessary percentage of base revenue to be spent on teachers' salaries of from 65 to 75 per cent.<sup>9</sup>

In Oklahoma, by means of an extra appropriation \$1,900,000, salaries of teachers in state-aid schools were increased \$15 per month for those with qualifications of more than forty hours of college work; those having less were legislated a minimum salary of \$55. Degree teachers' salaries were increased \$20 per month. The maximum for all teachers without a degree but with more than forty hours of work was set at \$110, for those with a bachelor's degree, at \$130 and for persons holding a master's degree, at \$140.<sup>10</sup>

New Jersey authorized its school districts to grant increases "not exceeding 20 per cent of the regular salaries as a "temporary bonus." The increases will terminate Dec. 31, 1944. They are not to be construed as salary increases and do not enter into retirement calculations. They are inapplicable to elected officials and to those earning over \$5000. Those earning over \$3000 receive the bonus only on \$3000.<sup>11</sup>

#### Unspecified Increases

Utah appropriated \$658,000 for salary adjustments to be made on an individual basis by local boards to teachers "who enter into contracts for continuing service." This money must be used exclusively for salaries and wages.<sup>12</sup>

Indiana granted state aid of no less than 80 per cent of the average minimum salary on an eight month term, the funds to be earmarked for paying teachers.<sup>13</sup>

Tennessee increased appropriations by \$1,620,750, which will give teachers a monthly increase of from \$5 to \$10 for eight months. An annual appropriation of \$850,000 is to be divided equally among all elementary and high school teachers and principals as an emergency supplement to present salaries, yielding an increase of about \$5.25 monthly for eight months. Two dollars more monthly is made available in each of the appropriations for elementary and high schools.<sup>14</sup>

<sup>9</sup>Arkansas, S.B. No. 91, § 10, 3.

<sup>10</sup>Oklahoma, H.B. 361.

<sup>11</sup>N. J., Laws of 1943, Ch. 31.

<sup>12</sup>Utah, H.B. 28.

<sup>13</sup>Indiana, Laws of 1943, Ch. 263, § 3.

<sup>14</sup>Tennessee, Public Acts 1943, Ch. 1.

North Carolina's war bonus assures school employees of the same increase as other state employees in the same salary brackets, yielding monthly bonuses of from \$5 to \$24. North Carolina also converted the \$3 maximum for substitutes into a minimum. In addition, \$250,000 was appropriated for the first year and \$500,000 for the second to decrease further the differential between salaries paid to white and to Negro teachers.

Kansas granted general increases to county officers, guaranteeing county superintendents at least a 10 per cent increase.<sup>15</sup>

#### Minimum Salary Schedules

Other states achieved salary increases by the more basic method of raising the statutory minimum salary. Oregon raised its minimum from \$85 to \$133.33 monthly, or \$1200 per year. The minimum in North Dakota has been raised from \$45 monthly to \$75. Oklahoma, as we have seen, set a minimum in its graduated salary scale and North Carolina converted a maximum substitute daily salary to a minimum schedule.

Wisconsin and Utah made minimum salary schedules a condition for receipt of state aid. Wisconsin stipulated a minimum annual salary of \$1200 for teachers whose certificates are based on four years of professional training with a degree, and of \$1000 for those with less training. This state raised the legal minimum for Milwaukee to \$140 monthly and to \$6 daily for substitutes.<sup>16</sup> Indirectly, salaries were raised by another state-aid condition that teachers must be granted at least five days' sick leave with pay, which can be accumulated to thirty days.<sup>17</sup>

Utah's minimum schedule sets \$840 for teachers without a degree, \$960 for those with bachelor's degrees and \$1056 for teachers holding a master's; it also requires annual increments of from \$45 to \$50 for sixteen years.<sup>18</sup>

Tennessee's law now requires the state board of education to adopt state-wide minimum salary schedules, subject to the approval of the commissioner of education.<sup>19</sup>

<sup>15</sup>Kansas, S.B. 275.

<sup>16</sup>Wisconsin, Laws of 1943, Ch. 105.

<sup>17</sup>Wisconsin, Laws of 1943, Ch. 37.

<sup>18</sup>Utah, H.B. 28, § 3.

<sup>19</sup>Tennessee, Public Acts 1943, Ch. 1, § 3.

South Carolina's appropriation act embodies a "legislative interpretation" that, although schedules are primarily of state payments, local boards have discretion to consider the character of the work, experience and efficiency "so that the salaries or compensation of all teachers shall be based upon the value of the services rendered."<sup>20</sup>

#### General State-Aid Increases

In four other states, at least, additional state aid will raise salaries. Funds have not been specifically earmarked for that purpose, it must be pointed out.

Although a bill in New Mexico for a \$1200 statutory minimum was killed, that amount may be approached through the enactment of a law making available for instructional service some \$300,000 accruing to the state from the federal Mineral Land Leasing Act.<sup>21</sup> It is expected that substantial salary increases will result.

Michigan's minimum salary bill also died. However, by general agreement, an additional \$5,500,000 in state aid is to be used to increase substandard wages for teachers, custodians and clerks, to eliminate inequities and inequalities in salary schedules and to increase other salaries in part to compensate for the rise in living costs.<sup>22</sup>

By establishing minimum standards of schooling of \$1000 for each elementary classroom unit and \$1333 for each high school classroom unit, Colorado makes money available to pay teachers in counties adopting the program if local boards so desire.<sup>23</sup> There is expectation of a 15 per cent increase.

Similarly, Maine's apportionment from the state school fund on the basis of teaching positions makes an extra \$90 available for salary increases if so desired by the local boards.<sup>24</sup>

Statutory enactments such as these, designed to halt the trend away from schools, at a time of serious teacher shortage, cannot but help to maintain schools as an effective weapon of defense for a nation at war.

<sup>20</sup>South Carolina, Laws of 1943, Governor's Act No. 323, § 9.

<sup>21</sup>New Mexico, H.B. 54.

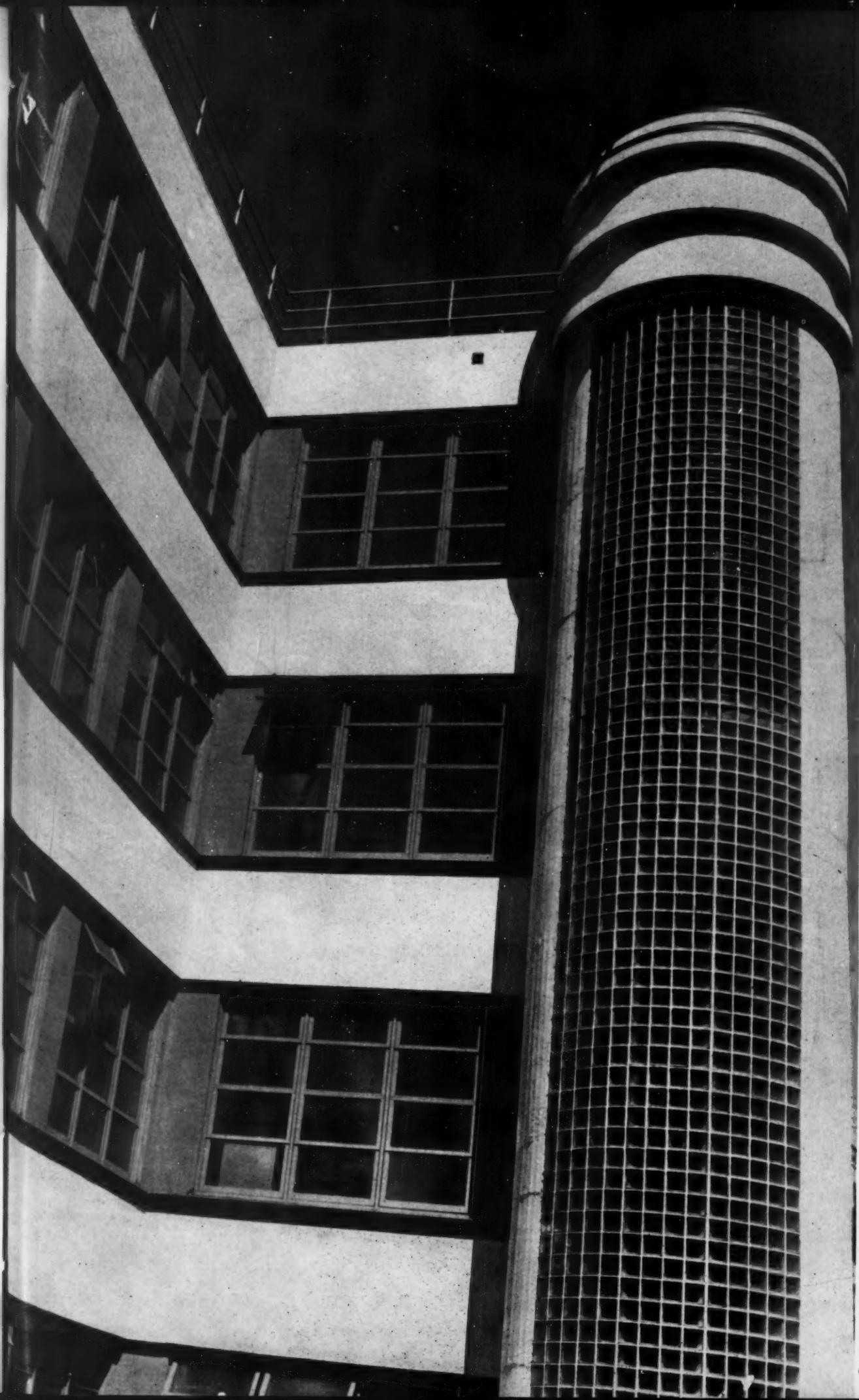
<sup>22</sup>Michigan Education Journal, April 1943, p. 420.

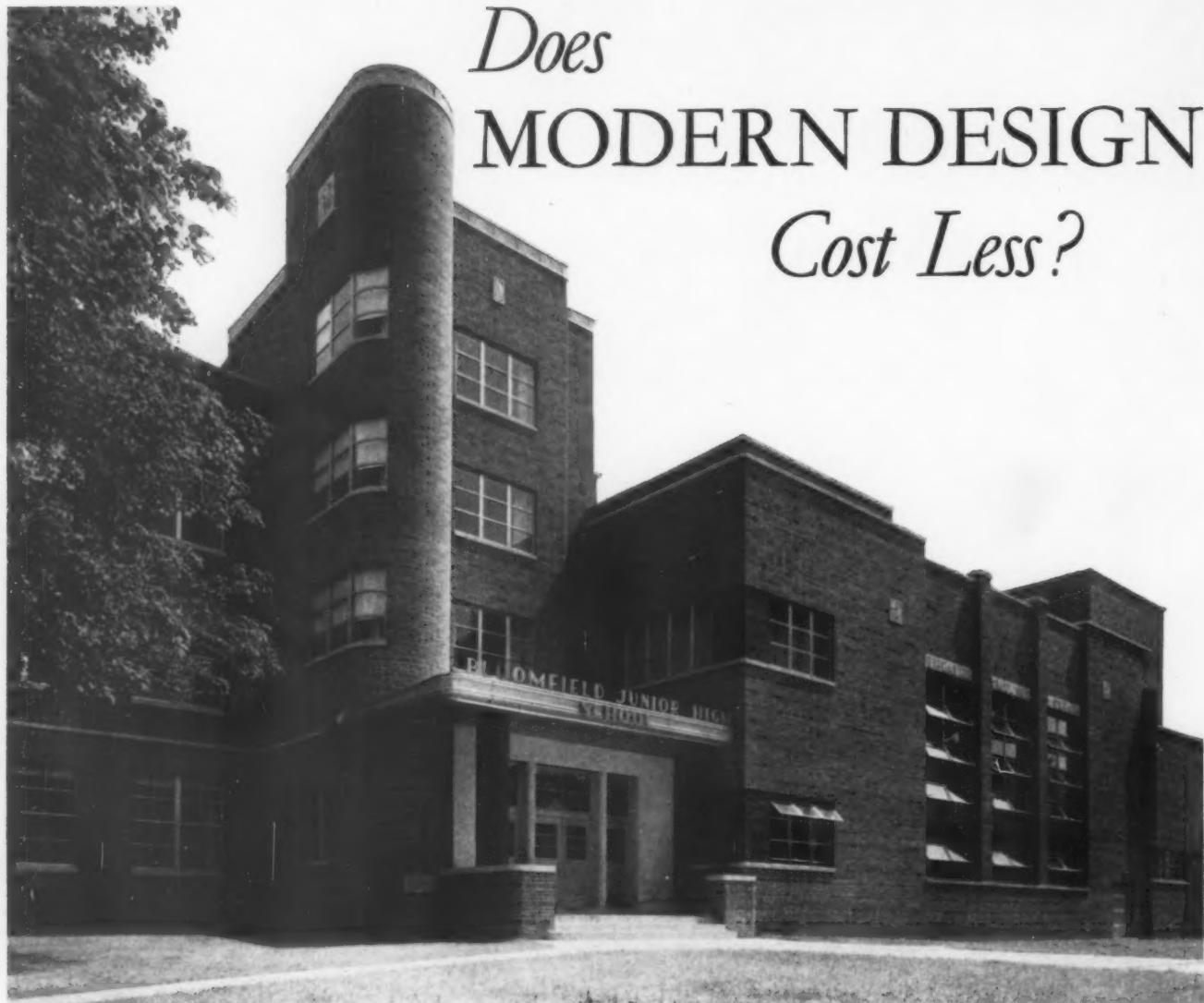
<sup>23</sup>Colorado, H.B. 362.

<sup>24</sup>Maine, Laws of 1943, Ch. 109.

# SCHOOLHOUSE PLANNING

Courtesy of San Francisco Public Schools





# Does MODERN DESIGN Cost Less?

ENDLESS and heated discussions have occurred among members of the architectural profession as to the relative merits of "modernistic" style *versus* the more familiar adaptations from Renaissance, Elizabethan, Classic, Gothic or Georgian. "Modernistic" has been defined by its admirers as a new, original style meeting all requirements for real "functional" design at—so they claim—a saving in construction cost.

Modernistic design is neither new nor original, as may be confirmed by an examination of early Mayan, Egyptian and Greek design. The basic principles of all design—proper massing of solids and voids, emphasis of horizontal or vertical lines, the introduction of color and texture—are essential regardless of the style employed.

The claim of modernistic being purely functional is open to question. A study of modernistic buildings finds masonry cantilever corners hanging in the air, structural col-

**RALPH E. HACKER**

Architect, Fort Lee, N. J.

umns intruding on valuable floor space supporting bracketed connections—principally to avoid breaking exterior horizontal lines of masonry and glass, intricate construction for cantilever shelters, unnecessary repetitive piers, materials used that require special and expensive precautions for their support and expansion. These and similar elements refute rather than substantiate the strictly functional characteristics claimed. However, it is the claim of economy that we wish to examine.

Any appraisal of relative costs between school buildings designed in modernistic style and those designed in other styles requires that such comparison be limited to buildings similar in type and structural frame, erected at comparable labor and material cost and equally meritorious in architectural design.

The following discussion is concerned with relation of cost to design and not the desirability of the materials or construction. In some instances the merits of a material may justify additional cost.

Few modernistic buildings are designed without using some glass block. The idea is prevalent among laymen that glass blocks are load bearing. Instead, the greatest precaution must be taken to prevent weight from any other part of the construction being transmitted to the block. If the width or height of block panels exceeds certain dimensions, the glass must be subdivided with additional structural members. Provision must be made for expansion and contraction of the block at the head and jambs by means of asphalt emulsion, expansion joint strips, oakum packing and mastic calking compound. Continuous metal wall ties embedded in mortar are required in horizontal courses, as are built-in metal wall anchors.

To ensure against leakage through cement mortar joints of glass blocks, it is necessary to rake out the exterior surface of the joint to a depth of  $\frac{1}{4}$  inch and repoint with calking compound.

Estimates in August 1941 showed an additional cost for glass block of \$1.25 per square foot above the cost of high quality wood window frames and sash. In some locations, such as gymnasiums, the additional cost may be offset by saving on equipment items, such as window guards, shades and insulation.

Many modernistic buildings use stainless steel trim and fascia with excellent effect. This is an expensive material requiring considerable labor cost for proper anchoring, provision for expansion, protection of joint between fasciae and back-up material. Permanency and attractiveness are considered justification for the use of stainless steel.

Some modernistic school buildings feature glazed, curved corners. Just why it is essential to have a window in a corner has never been satisfactorily explained, other than that it is different, although certainly not functional. The support of the masonry is accomplished by cantilever construction that is not always successful, judging by the resultant wall cracks in some school buildings. Again, considerable expense is involved for structural members, window frames and radius brick.

Cantilever shelters are convenient during inclement weather or for shade in hot climates but require extreme care in placing reenforcing, structural framing, anchoring and counterbalanced loads. Forms must be left up for a longer period of time. All of the foregoing items require added cost.

Many modernistic schools use curved masonry corners, circular towers, molded and ground face brickwork. A few use oversized face brick. The material cost for such specials varies from 12 to 270 per cent above that of regular brick. The cost of laying increases from 100 to 300 per cent. Oversized brick, 5 by 12 inches, weigh from 12 to 14 pounds each—a sufficient weight to require the mason to lay down his trowel and use both hands to set each brick. The additional cost of manufacturing and laying oversized brick is offset in part by fewer bricks being required.

Horizontal bands are used in light brick fields to create or emphasize horizontal lines. Band brick cost approximately 5 to 8 per cent more than field brick. The cost of laying the bands may be increased from 40 to 100 per cent, as the dark brick invariably used are vitreous. Because of the lack of suction, the mortar sets slowly and only a few courses can be laid at a time or bulging will result in the wall below. For this reason masons and mortar tubs must continually be shifted to other sections of the building, resulting in loss of time and increased cost.

Before priorities came into effect, aluminum sash, frames, sills and copings were being used in many modernistic schools. Here, again, the

cost exceeds that of wood or steel by a considerable margin.

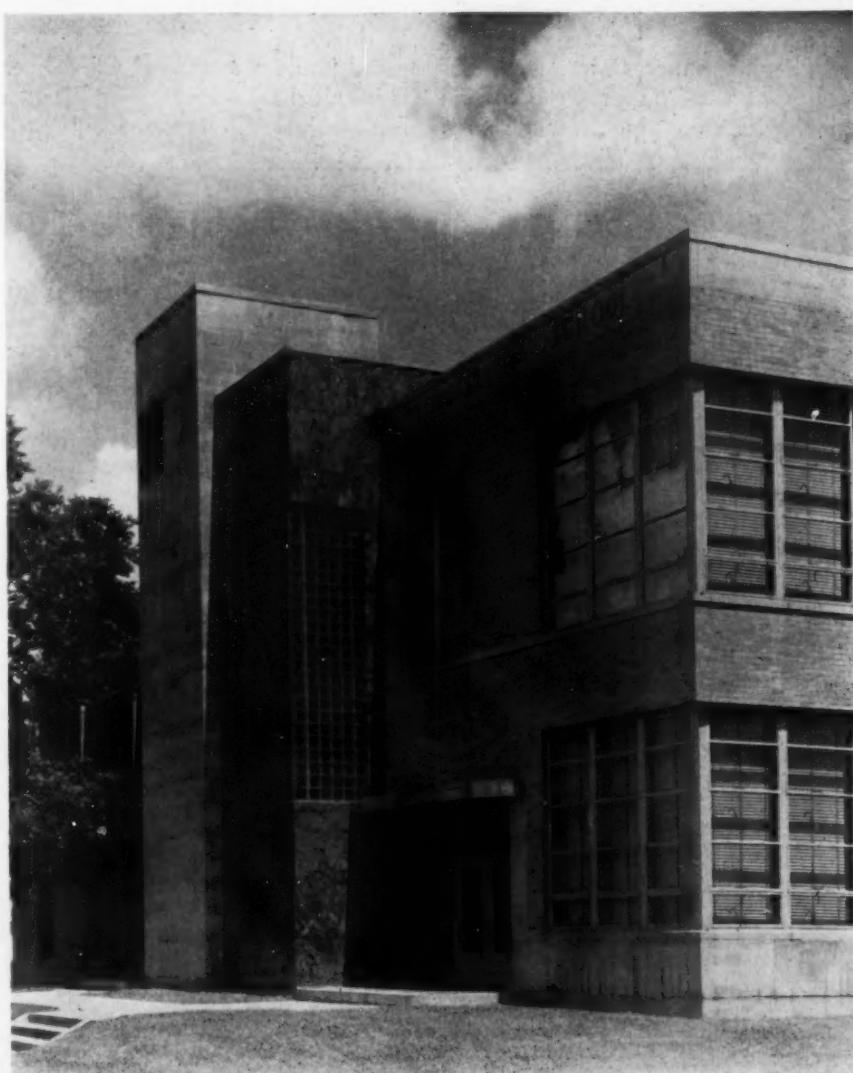
Narrow horizontal window panes require heavier glass than the smaller rectangular ones. For safety, doors should be glazed with  $\frac{1}{4}$  inch thick wire glass where long narrow panes are used.

The modernistic school invariably is designed with a flat roof, a feature often assumed to be characteristic of the style. It is said that great savings result from the elimination of overhanging cornices and box or hung gutters and from reduced roof surface.

Flat roofs are not confined to modernistic design but are used on buildings of Tudor, Georgian, Classical and many other styles. Cost reduction from the use of a flat roof cannot be attributed to the selection of a particular style.

While it is true that the roof surface is less for a flat roof than for a pitched roof, other factors, usually overlooked, materially reduce this apparent saving. A flat roof requires

Opposite Page: Bloomfield Junior High School, Bloomfield, N. J., Starrett and Van Vleck of New York City, architects. Below: Longfellow Elementary School, Waterloo, Iowa, Mortimer B. Cleveland, architect.



a parapet wall and additional height of interior corridor walls. For each 100 lineal feet of brick exterior wall, plus one interior corridor wall, approximately 4500 additional face brick and 11,000 common brick are required.

#### Coping and Drains Costly

The top of the parapet wall should be protected by a coping and the rear face by flashing. If the coping and flashing are of copper, a beveled 2 by 12 inch plank must be bolted to the wall as a base for the copper coping. Approximately 3 square feet of copper is required per lineal foot of exterior wall. Copings of other materials are, as a whole, much higher in cost. Parapet walls require the construction of cants to deflect the water from the base of the wall and additional labor and material are required to lay out and construct the roof deck to divert each unit area of roof drainage to its proper roof drain.

The beehive roof drains and the flashings around the drains generally used with flat roofs are costly. The roof drains connect to interior leader drains of cast-iron or wrought-iron pipe. Cast-iron pipe is made in 5

foot lengths, is heavy to handle and must be calked at each joint with lead and oakum. Horizontal cast-iron storm drains must be provided below the first floor to receive the drainage from interior leader drains. When erecting forms for foundation walls, openings through walls must be blocked out for passage of the drains and inserts provided in floor slabs for hangers or some other method of support must be installed. In contrast, exterior leaders from hung or box gutters are generally of copper in 10 foot lengths, light in weight and easy to transport and install.

In modernistic buildings interior trim is reduced to a minimum. Here, again, a saving of material and labor is claimed. Backbands on wood trim are frequently eliminated and plaster is brought to within  $\frac{1}{4}$  inch or so of the face of the trim. In such instances the trim is beveled, the plaster being allowed to extend behind the trim in the hope of avoiding a shrinkage crack, and the trim is applied before the plastering is started. If the trim is to be applied to a wood jamb, a concealed wood buck is installed for stiffening and fastening the jamb. The wood buck and

adjoining masonry wall are then covered with wire lath, but a crack invariably occurs in spite of these precautions.

When kiln-dried wood trim is applied before starting the plaster work, it absorbs a high percentage of moisture. Corkboard or a wainscoting of wood or linoleum, fitted against the edge of the trim, requires careful cutting and fitting by mechanics and much additional time. Later, as heat lowers the moisture content of the materials in the building, the trim shrinks from the adjoining surfaces, leaving an unsightly gap. Invariably the trim opens at the joints.

#### Color and Ornament Needed

Simplicity is the keynote of modernistic design, yet, as in other styles, large surfaces require treatment in color, texture or ornament to avoid being drab and uninteresting. Color is introduced by varying or combining materials, changing textures or using metals with baked-on finishes. Ornament used on modernistic buildings too frequently resembles a throwback to some *passé* cubist inspiration. Such treatments may or may not add to the appearance but they do add to the cost.

The treatment of some large modernistic schools suggests that the designers have involved themselves with a vertical treatment and, having grabbed the bull by the horns, can't let go. These buildings contain repetitive bays, each separated by unnecessarily large piers soaring heavenward. After reaching three or four stories in height, they abruptly terminate their approach to infinity, content to resemble a truncated warehouse. Though basically the fault of the designer, additional cost results from attempted modernistic.

Vertical emphasis in modernistic is achieved in some buildings by treating bays throughout the various stories as a single unit. Brick panels, trim and pattern work are used to tie the treatment together, again at an increase in cost.

Supposed economies on school buildings deceptively simple in appearance are often offset by increased costs not readily apparent. Comparative studies on school projects indicate that buildings of modernistic design do not necessarily cost less than the same buildings designed in other architectural styles.

## Rugged Strength Through Native Stone



Appropriate to the landscape and to the staunch young citizens that are being trained is this consolidated school building in Fleming County, Kentucky. It houses pupils from fifth grade through high school and is constructed entirely of native stone.

# Los Angeles Studies Postwar Construction

*grade schools for suburbs  
expected to lead the list*

FRANK O. EVANS

Assistant Superintendent and Supervisor of Educational  
Housing Section, Los Angeles City Schools

IT SEEMS probable that the activities of the postwar period will include much school construction, for all replacements and additions to existing facilities have been postponed and a new set of needs has arisen from the shifting of population and the increase in the number of young children.

There is great danger that this program of construction will be poorly planned and hastily executed for present interests are completely centered on war activities. Only by deliberately setting up a tentative program and completing plans whenever possible can this danger be avoided.

#### Analyzing Current Trends Difficult

The difficulties in analyzing the new needs completely are apparent but at least preliminary studies should be made. Plans for replacements and completions, on the other hand, can be prepared with greater certainty and there is no reason why such plans should not be made on all details.

In compiling a tentative postwar program for the Los Angeles city schools the most difficult task has been that of analyzing current changes and trends.

The immediate effect of a declaration of war was to check the influx of visitors which had regularly brought us an increase in enrollment during the winter months. Until February the enrollment figures remained much the same as they had been during the previous

year but by that time the evacuation of the Japanese had begun and this led to a reduction of 7000 in all school classifications. By the end of the school year other factors, such as the departure of Mexicans to agricultural centers and the closing of small businesses, had brought this loss to 15,000.

The ever-present advocates of tax reduction pointed to these losses as permanent and argued for corresponding reductions in the budget. The opening of the present school year brought many new pupils but not a complete replacement of the losses of the previous year. By the fourth month the influx of war workers had offset these losses in the elementary schools and in February elementary enrollment exceeded that of the previous year by between 4000 and 5000.

In junior high school grades gains and losses approximately balanced, but in the senior high schools enlistment and employment, added to the effects of evacuation and emigration, brought about a decline of more than 8000 pupils.

In planning housing facilities for the new residents of Los Angeles the chief difficulty is not one of numbers but of location. Practically all of the increases have occurred in areas in which schools were already overcrowded, while population in the older portions of the city has been reduced. As a result, it has been necessary to provide temporary housing for some 7000 children in new areas, while a number of schools

in other locations have been closed.

Practically all of the 43,000 new homes reported by the Regional Planning Commission are in suburban areas and represent actual increase in the number of families. The construction of 13,000 dwelling units in city housing projects is largely replacement and has not greatly changed school needs.

#### Only Replacements for High Schools

Future school needs must be based upon changes in the number of children born in the community as well as upon immigration. Birth rates have been increasing since 1936 and the number of preschool children indicates higher enrollment in elementary grades. Conversely, the low birth rate of the previous decade points to reductions in the higher grades and is at present greatly augmented by other causes. The keynote for postwar planning seems to be expansion of elementary school facilities with only replacements and completions for high schools.

The program under study for Los Angeles consists of replacements to the extent of approximately 25 per cent of the budget, with the remainder equally divided between completion of existing plants and new schools. Two new junior high schools are included on the basis of needs which have been recognized but which have had to be postponed for lack of funds. With this exception new construction consists of elementary school buildings for growing suburban areas.

# For Better VENTILATION

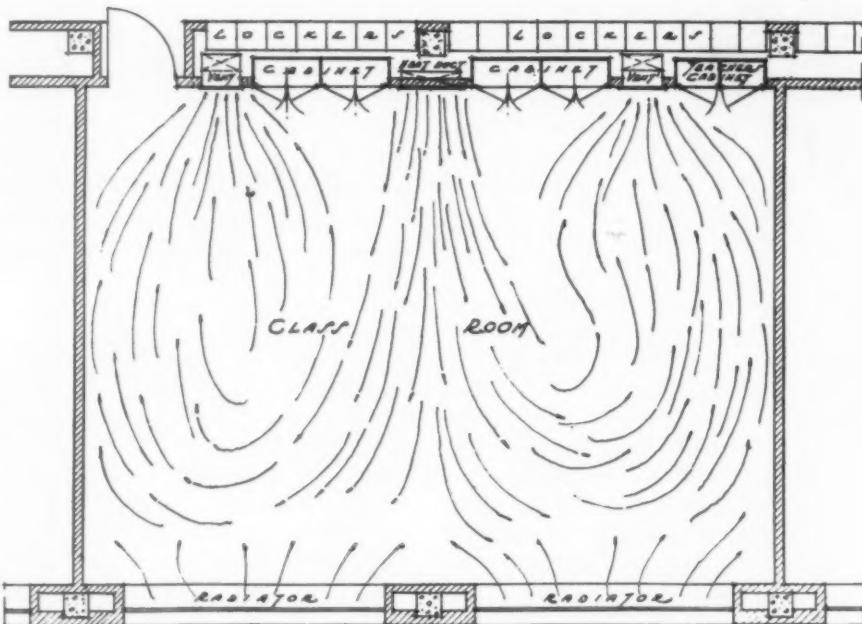
GEORGE SCHULZ

Director, Department of Building Planning, Detroit Public Schools

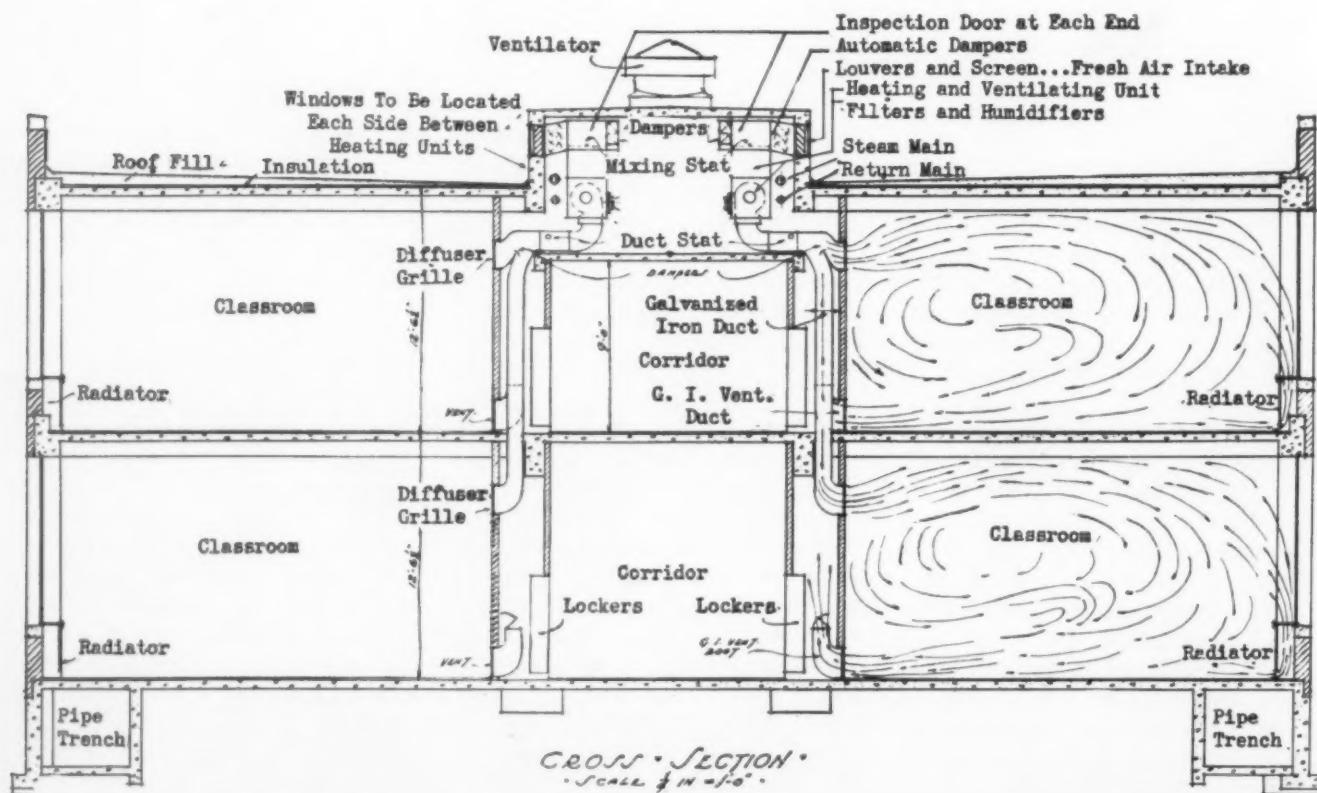
**I**N DETROIT the ventilation system commonly used is the involved central fan system, necessitating large underground fan rooms and long underground plenum chambers carried to all parts of the building. From the plenum chamber the tempered air is forced through ducts to the various rooms by maintaining a static pressure in the plenum.

Theoretically, the central fan system of ventilation has been satisfactory but, in practice, many problems have constantly arisen, such as balancing of air supplies, difficulty in delivering properly tempered air to all parts of the building and difficulty in maintaining proper static air pressures in plenums to ensure adequacy of air supply.

Because of the extreme lengths of plenum chambers required in the modern city school, air temperature drops in the plenums have resulted



Plan of typical classroom (above) showing circulation of tempered air under unit system. Each unit serves only two classrooms (see cross section below); thus it is possible to cut off classrooms not in use.



in the introduction of booster heaters and retempering coils in an effort to retemper the air before delivery to the classrooms.

With a desire to improve ventilation conditions in school buildings and at the same time to decrease capital expenditures and operating costs, the unit system of heating and ventilating is offered as a suggestion for design in future school buildings.

The unit system, as outlined, is based on the split system principle, namely, direct radiation and tempered forced air for ventilation, eliminating expensively designed fan rooms and plenum chambers and substituting several small unit ventilators, each capable of ventilating two or three classrooms (determined by the height of the building). These ventilators are located in the recirculation space available over the top floor corridors of any school building. Both central fan and unit systems provide direct radiation to each room. A committee of consulting engineers was requested to study the unit system and make a report on its merits as compared with those of the central fan system now used by the city of Detroit.

#### Unit System More Flexible

Included in the comments submitted by the committee were the following points of interest in regard to the unit system: The unit ventilation system was considered far more flexible in the operation of the school plant because each ventilating unit furnishes tempered air to only two classroom units in a two story building. Under this system it is possible to cut off individual units, controlling classrooms not in use without affecting ventilating conditions in the remainder of the building. To meet the increasing demands of community activities, auditoriums and gymnasiums can be ventilated without the operation of the entire system. The units are easy to operate and maintain. The unit system of ventilation, as herein recommended, is without a doubt far more flexible than any system of ventilation heretofore developed for Detroit school buildings.

The unit system of ventilation provides a positive air supply to every room of the building, since each unit is capable of delivering a given amount of air per minute. Air is actually forced into each room and

### Comparison of Central Fan and Unit Ventilator Systems

#### CENTRAL FAN SYSTEM

1. Depends on large fan units.
2. Fresh air introduced through air shafts carried from roof to basement fan rooms.
3. Large fan rooms necessary.
4. Large plenum chambers necessary.
5. Air tempered through banks of heating coils in fan housing.
6. Filtering of air accomplished through air washers.
7. Air reheated through reheat coils.
8. Air humidification accomplished through air washers.
9. Booster heaters required to pick up air temperature drops in long plenum chambers.
10. Large amount of sheet metal required for duct work and fan housings.
11. Classroom air supply affected by loss of static pressure because of length of plenum chambers.
12. Ventilation system difficult to balance because of great number of classrooms served.  
(a) Temperature regulation difficult because of air temperature drop and loss of static pressure.
13. Sump pumps generally required because of deep excavations.
14. Large fan units must be operated to ventilate one room or all rooms.
15. Central fan system complicates construction problems.
16. High installation costs necessitated.
17. Unit construction expensive.
18. High current consumption.
19. Steam supplies required for:  
(a) direct radiation, (b) coils,  
(c) booster heaters.
20. Keeps operating units underground.
21. High percentage of critical material required.

#### UNIT VENTILATOR SYSTEM

1. Depends on small unit ventilators, one to every two or three rooms (height of building).
2. Fresh air introduced through louvers at roof direct to unit ventilator.
3. Fan rooms not required; recirculating chamber provides space for unit ventilators.
4. Air supply ducts carried directly from unit ventilator to classrooms.
5. Air tempered through heating coils in unit ventilator.
6. Filtering accomplished through use of cleanable or renewable filters.
7. Not necessary to reheat air supply.
8. Air humidification accomplished through spray or grid type of humidifiers.
9. No booster heaters required.
10. Sheet metal work cut at least two thirds.
11. Classroom air supplies very positive because of short run of duct from unit ventilator to each room.
12. Unit ventilation system easy to balance. Only two rooms served by each unit.  
(a) Temperature regulation positive because of constancy of air supply and air temperature introduced.
13. Sump pumps generally NOT required; no deep excavations.
14. Unit ventilators are operated only for rooms actually used.
15. Unit ventilator system simplifies construction problems.
16. Installation costs materially reduced.
17. Unit construction inexpensive.
18. Low current consumption.
19. Steam supplies required for:  
(a) direct radiation, (b) unit ventilators.
20. Places operating units accessible to daylight.
21. Substantial reduction in critical materials.

does not depend upon developing a pressure in the plenum which, at best, is not a fully satisfactory method of introducing air evenly into all rooms.

#### Better Control of Room Temperature

Control of room temperatures can be more accurately achieved through the use of the unit system of ventilation than under the central fan system. This is due to the close proximity of the ventilating unit to the room to be ventilated, the uniformity of air supply delivered to each room and the fact that there is practically no air temperature drop between the unit and each room.

For removal of dirt, dust and other foreign matter the unit ventilator system depends entirely upon the use of either cleanable or renewable filters, whereas the central fan system requires air washers. It is generally recognized that the unit ventilator type of filter is exceptionally satisfactory for the removal of undesirable matter from the air and it is not difficult to maintain. Filters in unit ventilators need be cleaned only every two months while it is necessary to clean air washers at

least every week or two to keep the fan system in satisfactory operation.

Air humidification as applied to unit ventilators is generally accomplished through the use of humidifiers of the grid or spray type, while the central fan system depends on air washers. The relative merits of the various types of humidification is a debatable subject, as is the question of the proper amount of humidification to be maintained. Air humidity control is subjected to all manner of natural difficulties, such as both outside and inside air humidity and air temperatures, humidity developed through moisture released from human bodies and the temperature of the water used for humidifying purposes. Normal day to day fluctuation in air conditions presents a difficult problem in accurate humidity control and present equipment does not provide an accurate method of measuring and controlling air humidity.

#### Effect on Costs

A careful study of construction and operating costs leads to certain conclusions.

The elimination of large fan rooms,

plenum chambers and other resultant construction problems and the substitution of the unit ventilator system will result in a minimum saving in capital expenditures of from 15 to 20 per cent and will actually improve school ventilation conditions.

The substitution of the low powered unit ventilator and its direct delivery of properly tempered air to each room for the heavily powered central fan units and plenum chambers with their air temperature drops and loss of static will result in a substantial drop in fuel and power costs. Although there is a marked difference of opinion as to the saving in maintenance costs which might be possible through the introduction of the unit ventilation system, it would appear that these costs should be lower than those involved in maintaining large central fan units. Certainly the possibility of a breakdown in classroom ventilation will be reduced to a minimum through the use of the unit ventilator.

In a study of the merits of the unit system as related to the war effort, it was found that the use of critical materials is cut to a minimum. This is true concerning not only the critical war materials used in the mechanical system itself but also the essential structural materials usually utilized in the construction of fan rooms, plenum chambers and self-supporting floor slabs.

A comprehensive study of various schools erected in Detroit indicates that the volume of each building actually utilized for educational purposes, including activities, ranges from 50 to approximately 65 per cent of the total building volume, the average being about 58 per cent in the buildings constructed within the last twenty years. A redesigning of architectural details, possible through the introduction of the unit ventilator principle, would increase the volume available for educational purposes to approximately 78 per cent of the total building.

An over-all increase in construction and operation efficiency made possible through the introduction of simpler construction methods and the utilization of a simple ventilation method merits the serious consideration of school officials, school architects and consulting engineers in anticipation of postwar construction programs throughout the schools in the country.

## Creating a Background of COLOR

UNTIL the war is over, schools must make the best of old, sometimes very old, buildings. Inspiration for administrators discouraged over the dinginess of ancient buildings may come from Schenectady, N. Y., where last summer the century-old office building housing the board of education was redecorated. The building had once served as a courthouse. Redecorated, it now has an atmosphere all its own.

Ass't Supt. Tulloch M. Townsend, wishing to preserve the early nineteenth century flavor of the structure, called in as consultant a National Lead Company authority and, together, they selected old colors and saw that they were applied in the modern scientific manner. The result is complete "change of face,"

although nothing has been added to the regular cost of maintenance.

The transformation thus achieved has proved exciting to school officials, employees and visitors.

In the main entrance hall the ceiling and upper walls are in Colonial white, with Williamsburg blue subduing the lower walls below panels on which art school exhibits are posted.

The library has been painted gray-green with a white ceiling. Door frames are gray-green but the doors are flat white. The shelf-backs of the bookshelves are lemon yellow for high visibility.

A typical office has ceiling, book cases and window frames of white with sidewalls from ceiling to floor of turquoise.

# Meet the Chief Coordinator

## Part II

### LAWRENCE E. VREDEVOE

Principal, Lakewood High School  
Lakewood, Ohio

A COMPARISON of 26 school systems in the Great Lakes region in which cooperative techniques of administration were either succeeding or resulting in confusion, as reported upon last month, revealed an interesting contrast. In the former, a clear-cut distinction between the duties of the individual agent as a member of the planning and the executive groups was present, whereas this understanding was missing in the latter. Policies and decisions in the first group represented cooperative thinking and planning. In the second group no clear-cut decisions or policies resulted.

It was also evident in those cities of successful cooperative endeavor that individual differences of ability, specialization and training were recognized. Each agent was encouraged to participate to the best of his ability. His limitations, as well as his professional growth and development, were recognized. Individual interviews revealed that in these cities the best esprit de corps existed. The custodians respected the opinion of their supervisors and the classroom teacher, that of the principals. At the same time each person realized that his opinions were also considered valuable by those above.

#### How the System Operates

The administrative organization and procedures under the chief coordinator can be briefly explained as follows: the superintendent as an executive officer of both the state and the local board of education had the executive activity delegated to him as a unit. He in turn surrounded himself with specialists in training and experience to perform technical service in certain areas of administration, such as finance, records, personnel, building and grounds, curriculum revision, textbooks and supplies. These specialists were known as staff officers. They were

given administrative authority over personnel in their own offices. They were responsible for coordinating the efforts of all members of their personnel in the activities of planning, executing and appraising the duties assigned them.

In the smaller systems the building principal was the administrative officer responsible for the personnel and activities in his building. The specialists associated with the superintendent were called in whenever they were needed. In the larger systems staff members were appointed to supervise districts or divisions. Under this plan the principal became a member of the division or district supervisors' group.

#### Functions of Staff Officers

The staff officers were the individuals responsible for technical plans and supervision. They administered the execution of board policies that affected the areas of work assigned to them. The superintendent was responsible for coordinating the activities of all the staff officers into an efficient and effective administrative unit for the improvement of the instructional program.

The planning and appraisal activities were carried on by the personnel, organized into advisory groups to work with the superintendent. All school personnel and representatives of student and parent leaders were included. They were organized horizontally on levels such as assistant superintendents, secondary principals, classroom teachers and custodians. For other purposes they were organized vertically and then cut across all levels, including such representative individuals as teachers, principals, division superintendents, students and parents. Then, too, they might be organized on an interest

basis, such as a visual education committee, extracurricular activities committee or guidance committee. The function of these groups was planning, advising and appraising but not executing. This was done through the line organization.

A study of the development of a plan and its administration under a coordinator can best be understood through the analysis of a solution to a problem in one of the communities studied. The problem concerned the use of a building by adults and children during evenings.

#### Cites Specific Case

The superintendent requested the director of research to present the history and present policies affecting such activities. He then had conferences with the following groups: building representatives, recreation department, student representatives, P.T.A. representatives, assistant superintendents, custodians and board members. A representative committee of all groups was then appointed to recommend the best plans. The services of any of the staff members and departments were made available to this committee.

When the final plans were presented, the superintendent called in his staff assistant for a detailed study of the plans from angles of finance, use of building, instruction and supervision. After the plans had finally been crystallized into policies acceptable to the majority concerned, the superintendent presented them, with all the collected data, to the board of education.

The board adopted the policies and appropriated the money needed. The superintendent thereupon delegated the responsibility for the technical details of execution of the policies to respective staff officers and supervisors. Planning gave way to execution and each agent became a part of the executive activity.

When the plans were finally put into operation, staff members, teachers, custodians, parents and pupils cooperated in their appraisal. However, during the appraisal, the adopted policies determined the course of action.

Thus, the superintendent's chief contribution was the coordination of all planning, executive and appraisal activities.

The superintendent may have influenced the thinking of certain individuals and groups but he was primarily concerned about utilizing

the thinking of all groups concerned, the technical services of the specialists and the advice of those who were experienced in such activities. He was also interested in making certain that every staff officer and agent realized his responsibility in executing the policies that were finally adopted.

Coordination takes time, patience and appreciation of the individual's contribution in planning. Nevertheless, the rewards in understanding, professional growth of personnel and soundness of adopted policies outweigh the cost.

be sufficient. The impact of general educational aims on physical education has relegated these organic and neuromuscular factors into the background. There should be less emphasis on the leisure time element in physical education and more on physical fitness, not only in time of national emergency but during peace time as well.

Today there is little physical development to be found in the tasks that are available for city children. Development in play activity represents the only available training for physical strength. If a child is to obtain his physical development in this manner, he must have the vigorous play that is commonly associated with varsity athletic teams. He cannot expect to achieve physical development by participating in mild games, such as ping-pong or croquet. Highly competitive athletics are usually emphasized to pupils who least need this exercise. Where, then, can a growing child gain this needed strenuous muscular activity? From the regular physical education program? This is doubtful.

The average gymnasium class offers little physical stimulation. Playing with light balls and the incidental running and jumping necessary to the game comprise a biologically deficient program. Not only does the usual physical education program lack content, but also it lacks adequate time. Two or three class periods, of 80 to 120 total class minutes per week, are insufficient for children with specific organic and neuromuscular needs.

Cannon, in the *Annals of Internal Medicine*, May 1936, summarizes this problem when he speaks of the break in the age-old habit of using big muscles. He says that instead of keeping the body fit it is now "flabby and inefficient."

#### Back to Muscle Building

But why the emphasis on muscular development of school children? Numerous medical sources state that muscular strength is positively related to general health, physical fitness and the capacity for activity. With the absence of strength there can be no physical activity. When muscular strength is low or deficient, all other functions of life are seriously handicapped. The greater the physical motor efficiency the more completely one can fulfill his obli-

## *Let's not forget that it's* **PHYSICAL EDUCATION**

**DEOBALD VAN DALEN**

J. D. Pierce Junior High School, Grosse Pointe, Mich.

**F**ORTY years ago it was the practice in physical education courses to exercise boys and girls and develop their bodies into symmetrical, well-proportioned, strong instruments—bodies of which the individuals could be rightly proud and which were enduring enough to press through the day and evening without undue fatigue.

This period was followed by two successive movements characterized by the absence of emphasis on the development of the voluntary muscular system and by the enlarging of the scope of the physical education program.

The first of these movements is commonly referred to as "organic vigor." It emphasized light exercises and some recreation. Numerous light activities supplanted the more strenuous methods in the previous period. Muscular development became unfashionable; health began to take its place in the program.

#### "Ball and Whistle" Era

The recreation movement marks the beginning of the next period, a relatively sterile period in physical education. It was the "ball and

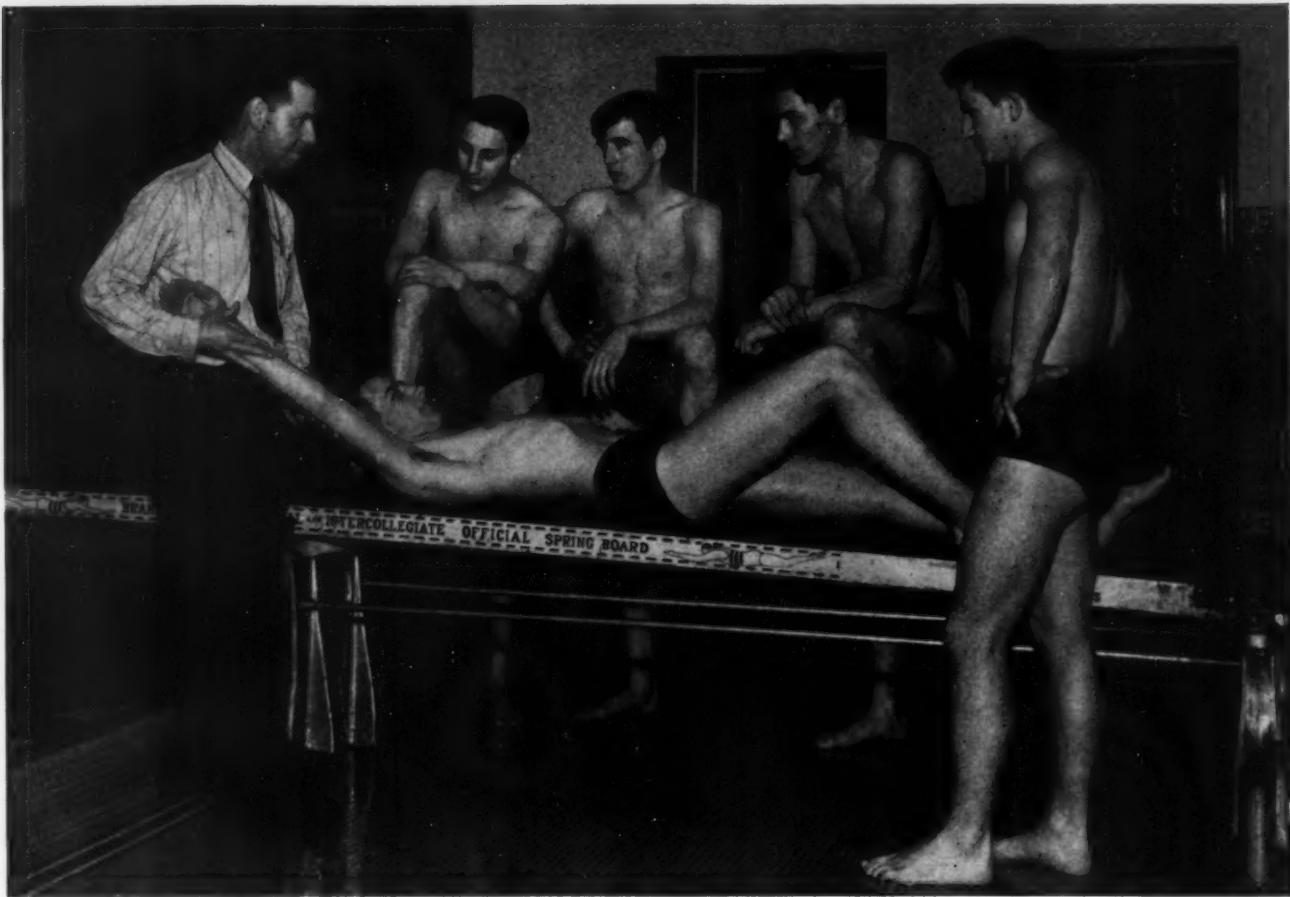
whistle" era. The game was the aim of the physical education program.

Born largely from the educational philosophy of Dewey and the Thorndikian psychology, the next significant movement in physical education is still with us. It is known as the educational movement. During this movement physical education became an acceptable member of the education family for educators began to notice the definite contribution that physical education could make.

#### Physical Fitness Lost Out

Though a correlation between the aims of physical education and those of general education is recognizedly advantageous, certain values have been lost in the shift from a formalistic body building, skill emphasizing, nonrecognized program to an informal, game stressing school program that attempts to serve all objectives. Physical education stands to lose its one unique contribution to general education, that of physical fitness as the logical foundation of man's activity.

Physical fitness involves the building of positive vitality or vigor; the mere elimination of defects will not



gations. But the basis of all power begins with physical factors—organic condition and physical efficiency.

Recent factorial analyses by McCloy and his associates have shown clearly that muscular strength is one of the most important items in all motor variables. On the average, muscular strength contributes more than twice as much to motor ability as does velocity and more than 10 times as much as does motor educability.

An essential to any physical activity is that the performer must possess a certain amount of skill. The acquisition of skill is, therefore, an important foundation to the enjoyment of certain physical activities for the play spirit is prompted by assurance of achievement.

It would seem that the development of muscular strength is of prime import to any rational physical education program. Children will profit from the development of a certain amount of strength—unadulterated physical strength. Most children and adults function far below their normal capacities. It is only as they increase the demands on the body that they build up increasing resistance, strength and fitness.

**Swimming instruction is one of the many muscle builders in the rejuvenated physical education program under way at the high school, Chisholm, Minn.**

Play that builds muscle tissue is of paramount importance to the child. Physical growth is partially conditioned by the type of activities engaged in by children. Children who roller skate and bicycle vigorously, with frequency and sustained effort, will get a certain development of legs, hearts and lungs. There is little in play, however, to develop muscles of arm and shoulder, back and chest.

#### **Doesn't Need to Be Formal**

I am not advocating a return to the formal program of the past. No activity need be formal if it can be invested with meaning and related to a purpose of life. Certainly the inclusion of vigorous muscular activity in the program is not devoid of meaning.

Many good things have been taught by bad methods and too frequently material of good content has been carelessly culled from the curriculum and condemned because of its faulty presentation. In this period of educational inventory and

reorganization the best of the past should be correlated with present progress in content and method.

I do not propose to ignore or neglect the validity of the numerous nonphysical goals of physical education but rather would emphasize that, first and foremost, the subject is *physical education*. The biological ends—biological growth, biological integrity and biological efficiency—should be the chief concerns, first, last and always. Similarly, the vocational ends of industrial arts and the linguistic ends of foreign languages justify those departments in the curriculum.

#### **Can Contribute to General Education**

True education is the harmonious development of the physical, intellectual and moral powers. Physical education is not a thing apart. Rather, it is one aspect of a child's education and it can legitimately contribute to general education by equipping children to be physically fit so that they may be able to live adequately and successfully.

# Can Teachers Shift Jobs?



**Question 1:** Is any teacher at liberty to sign a contract with her present school board for a position in the same school system for the coming year?

**Answer:** Yes. In this case the teacher would not be a new employee, neither would the school board be a new employer.

**Question 2:** Is a teacher in a public school whose term of service expired in May at liberty to enter into a contract with a board of education in another community?

**Answer:** Paul V. McNutt announced May 23 that changes will be made in W.M.C. Regulation No. 4 which will permit teachers contemplating changes to higher paid teaching positions to take such positions in the autumn.

**Question 3:** Is the teacher referred to in question 2 at liberty to sign a contract with another board if her term of service as a teacher is ended but the payment of her salary continues through the summer?

**Answer:** If the essential teacher is hired for a nine month period and she is paid on a twelve month basis, her job would be considered ended at the end of the nine months and the answer given under question 2 would apply. This assumes, of course, that the yearly payment is a con-

venient arrangement for the benefit of the teacher and does not represent a year work contract. In cases in which the work contract runs for a year, her position would not be considered ended until the year was completed.

**Question 4:** Are teachers who desire to secure a position in a defense industry immediately upon the close of their school work required to secure a certificate of release from their employing board?

**Answer:** If the teachers mentioned in this question have completed their terms and have been terminated by virtue of the completion of the job, a certificate of release should be given by the board stating that the job was completed thus permitting these persons to obtain a job in any industry.

**Question 5:** Under what circumstances are certificates of availability from boards of education necessary for teachers to sign contracts elsewhere or to secure positions in work other than teaching elsewhere?

**Answer:** In areas in which employment stabilization agreements are in effect, essential teachers are required to obtain certificates of availability in order to transfer from their present positions to positions in other essential industry.

**These questions and answers were worked out by the Kansas State Department of Education. They have been checked with the W.M.C., U.S. Office of Education and W.L.B. and brought down to date as of June 10.**

**Question 6:** If certificates of availability are secured from the W.M.C., what is the procedure necessary to obtain them?

**Answer:** If the school boards refuse to issue such certificates of availability, the U. S. Employment Service could issue them under certain circumstances as set out in the employment stabilization program, permitting the transfer of teachers to work in other essential industries. Detailed information concerning the procedure to be followed in the different areas can be obtained from the local offices of the U. S. Employment Service.

**Question 7:** How does the manpower order affect salary stabilization policies?

**Answer:** It is still within the federal program to allow increases in cases in which salaries have not been raised as much as 15 per cent over rates paid January 1941. Promotions within a school system or regular salary increases are not affected. Salaries prescribed by law or wage agreements between employers and employees are not changed by Mr. McNutt's new order.

Any plans for bonus payments or necessary special salary adjustments should be continued as there has been no change in *basic* salary stabilization policies. It is not necessary to report these salary adjustments to the Joint Committee if (1) adjustments are less than 15 per cent above salaries and wages paid Jan. 1, 1941, or (2) adjustments are necessary to eliminate substandards of living.

# Patching isn't always the answer for Leaking Walls

WALTER PROPPER

Roofing and Sheet Metal Crafts Institute, New York City

A LEAKING brick wall presents a problem that the experienced waterproofer approaches cautiously for cause is often unrelated to effect. Sometimes apparent leaks are really not leaks at all.

In one school, for example, the walls of several classrooms became wet under certain weather conditions. The building stood in the middle of a campus exposed to storms from the north and northeast. Some \$2500 had been spent to rake and grout the Portland cement mortar joints and in this process the outside brick joints in many areas had been chiseled out and repointed.

After repointing the trouble came back with the next northerly rain. Since the contractor had guaranteed the effectiveness of his job, he returned and applied a transparent waterproofing liquid to the areas. Although the liquid was colorless it darkened the bricks, already in rich contrast to the rest of the building because of new mortar joints. From a distance the wall looked like an eccentric checkerboard.

Elsewhere, where the walls had not been repointed, the old joints were found to be at least as good as the new ones. In scratching the bricks to test their hardness nothing was discovered that might be responsible for the leakage.

#### Inside Walls Streaked

Inside the classrooms, however, the offending walls were streaked vertically. They were not stained as they would have been had water penetrated from the outside; nor was the plaster surface effloresced as it would have been for the same reason. Efflorescence of plaster occurs when water breaks it down from a crystalline to an amorphous or powdery state. Obviously, no rain water went through the wall. The water came from the

room itself and dripped down the painted surface.

Condensation was the difficulty. Rain, striking the walls, chilled them through. The moisture within the rooms condensed on the chilled surfaces.

In ordinary construction the remedy for condensation is provided when the building is erected. A plaster wall is furred out from the brick wall, *i.e.* there is an air space between the brick masonry and the plaster inner wall.

The walls of these classrooms had not been furred out. Some other waterproofing device may have been attempted. Perhaps some waterproofing compound had been applied but it had deteriorated.

Cause and effect were clear enough in this case. The remedy is expensive but the experience is common.

#### Answers Not Always Easy

Sometimes, however, the answers are not so easy. Many of the inside walls in a modern 8 story building were spotted with water stains and much of the plaster in these stains was effloresced.

I chopped into the wall and found that it was furred. A hose was then applied and water went through the brick wall. This certainly was not condensation.

The construction of the wall was as follows: Outside was a brick veneer 4 inches thick, then came a lining of 8 inch hollow tiles, then the furring, then the plaster.

The engineer in charge of the building was with me when I made the inspection.

"How about transparent waterproofing compound?" he asked.

"If it works at all it will be only for a limited time," I told him.

"How about cutting out the joints and repointing?"

"It's a lot of wall."

"We could do it just where the leaks are."

"It may work," I said, "but what gets me here is that all the waterproofing of this wall depends on these mortar joints. It seems to me that you'll have trouble with this building as long as it stands."

The engineer in charge got several other opinions and then let a contract for \$12,000 to rake and grout the wall. A conscientious contractor did the work but, still, after every oblique rain that brings water in contact with the bricks, several old leaks reappear or new ones show up.

Don't misunderstand my implications. Repointing of mortar joints is not a maintenance necessity. A neglected wall can cause a lot of trouble, but when repointing is specified for leaking conditions an owner should be wary of placing large contracts without being sure that the work will be effective.

The best way to prove a specification is to make a preliminary test and then give the tested area plenty of time. There's no hurry. No wall that has developed trouble over a period of years has to be repaired over night.

#### Leaks on Top Floor

In the case of another building the leaks all appeared in the cove of the ceilings of the top floor rooms. When the owner first became aware of them he had his parapet walls re-flashed. This didn't do any good so, with the passage of time, mechanic after mechanic crowded layer after layer of waterproofing materials on the roof side of the parapet wall. Still the rain got through.

Finally, a brick mason whose specialty was waterproofing examined the wall and saw that the mortar joints were cracking and falling out.

He said: "Here's the trouble. You need a raking and pointing job from the top of the wall to the top level of the top floor windows."

It was a juicy job but the owner was ripe for it because he had tried everything else. The contractor was

convincing because he was himself convinced. (I'll interrupt myself to mention how remarkable it is that each specialist believes that his own specialty is the panacea for all ailments.)

In this case the contractor also convinced the owner and the repointing proceeded as specified. While the repair was in progress there was a severe storm and one completed portion leaked as much as ever. A small preliminary test would have proved that something other than a raking and grouting job was indicated for the building.

However, the job was completed. The contractor fulfilled his guarantee for a year and the leaks still showed up in the coves of the ceilings of the top floor rooms.

#### **Building Overwaterproofed!**

The condition in this case was the result of overwaterproofing. The back of the parapet wall had been waterproofed into a suction pump that drew the water through the brick wall. Space does not permit a discussion of the physics of this phenomenon, but the principle involved is that air chambers are formed on the back of the parapet walls by the sheet roofing materials and the air in these pockets expands and contracts with the changes in temperature around them. The contracting air tends to draw water from the outside and will do so through porous bricks or through such places as cracks in the bricks or in the cement mortar joints.

The simplest remedy for the condition is to de-waterproof the wall. Having been bitten so often, this owner was now twice shy about following the suggestion.

"How do I know it will work?" he complained.

"Make a trial repair on a small section. You've had this trouble for so long that a little longer won't matter."

He made the test. Three months later he was so well satisfied that he gave out the whole job for this type of treatment.

With the war on, my present recommendation under similar circumstances would be to try a \$100 worth and, if the repair works out, to put off the job until the end of the war. If it does not work, there will have been saved much labor that can be put to good use in defense.

## **BETTER PLANT PRACTICES**

### **Finds Insulation Pays**

Increasing attention is being given by school officials this summer to the matter of insulating roof and attic areas and to the installation of storm sash as a means of conserving fuel.

To comments on this subject reported in these columns last month, G. E. Wulffing, superintendent of property, Gary public schools, Gary, Ind., adds the following: "More should be spent on roof and attic insulation. From our experience we feel that it is money well invested."

Despite the fact that none of the attics or roofs of the school buildings at Gary have been insulated after construction, all the city's recent buildings have been provided with heavy roof insulation.

"We have installed storm sash in the majority of our buildings for the purpose of conserving heat and have found them an aid in keeping the temperature of rooms satisfactory," Mr. Wulffing states.

### **Word From Canada**

Although nothing has been done about insulating attic areas in the schools of Toronto, Ont., C. H. R. Fuller, business administrator and secretary-treasurer of the board of education, indicates that in recent years they have insulated under the roofing with  $\frac{1}{2}$  inch insulating board. This is done to take care of condensation under the roof. Storm sash have been installed only in certain old buildings as a protection against the cold and exposed places. Where installed, these have proved satisfactory although natural lighting is reduced somewhat.

Mr. Fuller finds that stokers of the blower type have conserved fuel. Also in recent years the Toronto schools have caulked around windows on buildings behind outside hanging stile.

### **Dayton Does Calking**

Although E. L. Lounsbury, assistant superintendent in charge of business for the board of education, Dayton, Ohio, is not preparing to do any insulating or to install storm sash during the summer, he has done and will continue weather stripping and calking.

"Our efforts to conserve heating," he says, "have been directed toward major improvements to our heating plants, such as installing stokers, putting automatic draft controls on warm air heating and ventilating units and modernizing warm air heating furnaces.

"We shall continue this program

commensurate with the funds and the critical materials available for this work during the war. Any program of installations and alterations for the purpose of conserving fuel is desirable provided funds are available for the cost of the program and the cost is not too high in proportion to the results attained."

### **War-Time Repairs**

Protective maintenance is the first thought of business officials this summer. With major renovations definitely "out" because of shortages of labor and material, it becomes necessary to concentrate on those operations that are essential and involve no war materials.

In the school district of St. Joseph, Mo., G. L. Blackwell, secretary and business manager, reports that they are paying particular attention to roofing, gutters, exterior and interior painting and brick pointing.

"We employ our own maintenance men for carpenter work and painting," reports Mr. Blackwell, "and are having no difficulty replacing defective roofs. We expect to replace at least two during this summer. This will be done through a contract by an outside firm. We contemplate only routine repairs."

### **Lakewood's List**

Here is a list of certain specific operations that are being undertaken at Lakewood, Ohio, as reported by R. P. Orchard, superintendent of operation and maintenance: roof recoating, classroom painting, floor sealing, furniture refinishing, downspout drainage cleaning, extra care of motors, insulation of attic ceilings to stop heat losses, some essential pipe replacements, interior painting, refinishing school furniture, inspection of drains and playground resurfacing. In other words, Lakewood is concentrating on work that can be performed by the regular custodial force.

Mr. Orchard insists that roof and gutter repairs must be provided for. Outside painting and brick pointing are being deferred except in exceptional cases.

### **Word From Bloomington**

Fortunately, all the school buildings at Bloomington, Ind., were painted on the outside last year. Consequently, Herschell Black, business manager, is concentrating on washing and painting interior walls and treating floors. "All our maintenance," he reports, "is done by our janitors, who work all year."

# THE SCHOOL CAFETERIA

CONDUCTED BY MARY D. GARMON BRYAN

## School Lunches *can teach* your community about EATING

GLADYS HILLS

Greenwich Tuberculosis Association, Greenwich, Conn.

**N**O PROVISION for the noon meal was made by the 10 elementary schools in Greenwich, Conn., prior to February 1941.

For several years the Greenwich Tuberculosis Association had provided free milk for school children but finally had concluded that half a pint of milk per child in mid-morning is not a preventive measure against tuberculosis.

In terminating this procedure the organization appropriated \$500 to the Greenwich Parent-Teacher Association, stipulating that a committee be set up to further nutrition education. In July 1941 a trained nutritionist was employed to plan a program for the community.

### Planning First Experiment

It was decided to experiment in one elementary school with a hot dish project on the basis that a lunch partly bought and partly carried is often the best choice.

The school chosen was built in 1895 and housed 343 pupils from kindergarten through the fourth grade with a staff of 12 teachers. The school day began at 9 a.m. and ended at 2:15 p.m. with about one fourth of the children being transported by bus from homes 1½ to 9 miles distant. Many of the children ate little breakfast, brought an inadequate lunch, then ate another meal upon returning home and were expected to eat supper two hours after this.

The Greenwich Tuberculosis Association called together interested leaders, such as teachers, Red Cross canteen workers, P.T.A. officers and the supervisor of Town Nursing Service, to discuss the possibility of

starting a lunch project. In addition to a budding plan and a substantial sum of money (\$85) this meeting brought forth a working nucleus to carry out the project.

The superintendent of schools gave permission to equip as a kitchen a discarded classroom on the first floor. The room had plenty of sunshine, a desk, a few chairs and one cupboard but nothing else. The board of education installed a large sink, put in cupboards, painted the room and laid linoleum on the floor.

The P.T.A. purchased other equipment: gas baking ovens, electric refrigerator, water heater, work table and small equipment, such as kettles, pans and cooking utensils, at a cost of \$355.32, which included \$300 from the Greenwich Tuberculosis Association fund. Added to this was the gift of a gas stove.

There was no place for a lunchroom and so food had to be served in classrooms. Twelve small tables belonging to the school were equipped with handles and casters by the manual training department for serving wagons.

### Community Cooperates

This demonstration project opened on Nov. 2, 1942, and closed on March 26, 1943, constituting in that period a splendid example of community cooperation. The plan under which it was carried to successful conclusion follows.

Realizing the importance of the educational aspects of such a project, the Greenwich Tuberculosis Association planned to help carry out some scheme of teaching. At the beginning the nutritionist provided large

quantity recipes for suitable dishes. Then she planned what the child could bring from home to accompany the hot dish in order to make a complete meal. Each week a menu for the following week was mimeographed and distributed to the children for their parents. Often teachers or pupils added a drawing or two. An effort was made to include some bit of nutrition education on these menu sheets.

### Telling the Public

The publicity chairman was responsible for getting the program into the local newspaper, as well as for preparing an occasional report on the progress of the project. A special nutrition leaflet was distributed to the children to carry home to their parents and was also sent to all other school children in the town.

An attractive farewell letter containing a plan for carried lunches together with suggested sandwich fillings was written to the mothers offering them the opportunity to call on the nutritionist for advice. A demonstration of a good packed lunch and how to combine the hot dish with food from home was given at a P.T.A. meeting.

As an extra feature a large commercial window near by was decorated with the aid of a department store according to plans by the nutritionist. The window demonstrated the importance of breakfast and showed a family sitting down to a full meal. The display also emphasized the difference between good and poor home-packed lunches. Some teachers took their classes to the win-

dow for observation and discussion. The food cooked at school was carried in pans or kettles to the serving wagons that were equipped with paper plates or cups and serving spoons (children brought their own spoons from home). The wagons were then wheeled into the classrooms. A volunteer or child served.

#### Parents Learn

Some of the teachers used the lunch as a teaching device. That they accomplished something was evidenced by the changes in the food brought from home and in the willingness of parents to try new and different foods. Many teachers correlated the discussions of food with health education, geography and war shortages. Lunch in some rooms was made an occasion with handmade place mats on the tables and fine manners, children taking turns being host and hostess, saying grace and serving the others.

When money for the hot dish was collected in the classrooms, most of the teachers made this an arithmetic lesson and allowed different pupils to collect, count and turn the money over to the volunteer server. Early each morning a child took a card to each room to check on the num-

ber of children taking the hot dish and returned it to the kitchen as a final guide to the cook and servers.

The project was self-supporting. There were a few children, about five or six, who were unable to pay the total price (6 cents) for the hot dish. These were recommended for assistance by the visiting teacher of the child guidance department. The money was given to the mothers so that they in turn could give it to the children and so embarrassment was avoided. The board of education paid for garbage collection, gas and electricity.

Volunteers were organized under a chairman, a member of the P.T.A. All buying, clerical work, supervision of cooking, serving and some food preparation were done by these workers. Mothers of school children, Red Cross nutrition aides and canteen workers and wealthy women with time for service worked side by side to make the project live. The only paid worker was the cook, a former P.T.A. member whose interest was as great as the chairman's. She received \$12 a week.

The staff was as follows: project chairman, P.T.A. member; director, a trained dietitian; chairman of volunteers, a P.T.A. member; 30 vol-

unteer servers (3 to 6 each day), Red Cross canteen workers, Red Cross nutrition aides, mothers of the school children and interested women; publicity chairman, a P.T.A. member; auditor, treasurer of the P.T.A., and cook.

The school was unusually fortunate in arousing the interest of a trained dietitian who is now a home-maker with a desire to give some service to the community. She served as director. She and another volunteer did the buying.

A few foodstuffs from the Agricultural Marketing Administration and some canned fruits and vegetables donated by the Greenwich Canning Project have helped to keep down expenses and occasionally to provide the children with dessert, as well as the hot dish, at no extra charge. Milk was sold with lunch.

#### Project Spreads

This experiment was watched with much distrust by some and with keen pleasure by others. Two schools in outlying districts have started similar projects. It is hoped that the experimental stage is past and that at least four schools will soon be carrying on a nutrition education program through a hot dish project.

### EDNA GILBERT

Director, Lunchrooms  
Youngstown, Ohio

A NEW set of luncheon menus was planned this last semester for schools in Youngstown, Ohio, to make use of less expensive dishes. So far we have been able to continue plate lunches at our previous price of 12 cents although, in some instances, portions have been decreased.

Prices on individual items were raised. Meat and fish dishes, previously 8 cents, were sold for 10 cents. The 10 cent meat dishes were raised to 12 cents. Some of the fruit salads and desserts were increased from 5 to 6 cents. Some vegetables were priced at 6 cents. Milk remained at the usual price of 4 cents.

Certain revisions were necessary. We used more meat substitutes and meat extenders, such as vegetable omelette (peas, corn and beans); vegetable casserole with cheese biscuit; meat balls with vegetables in

## Plate Lunches in War Time

### PLATE LUNCHES

#### Monday

Fruit salad,  $\frac{1}{2}$  cup  
Green beans, No. 16 scoop

Milk,  $\frac{1}{2}$  pint

#### Tuesday

Lima beans,  $\frac{1}{2}$  cup  
Milk,  $\frac{1}{2}$  pint

Mixed fruit,  $\frac{1}{3}$  cup  
Cookie

#### Wednesday

Chile con carne,  $\frac{1}{2}$  cup  
Milk,  $\frac{1}{2}$  pint

Peach,  $\frac{1}{2}$

#### Thursday

Tomato soup,  $\frac{1}{2}$  cup  
Apple, celery, nut salad, No. 16 scoop

Whole wheat bread, 2 slices

Butter, 1 patty

Cookie

#### Friday

Creamed potatoes

Milk,  $\frac{1}{2}$  pint

Fruit cup,  $\frac{1}{2}$  cup

casserole; beef liver and spaghetti in casserole. These dishes proved satisfactory.

There has been less variety from which to choose. Either a fruit salad or a fruit dessert was offered but fresh fruits, such as apples, oranges, and grapes, were always on the counter. Grapes and apples were used in fruit dishes to save on canned fruits.

Sandwiches, too, were changed in character. Meat substitutes were frequently used and one day a week there were no meat sandwiches. However, we featured a vegetable filling to which was added an egg or cheese.

Substitutes that have proved satisfactory are: sweet chocolate, dried fruits and jellies and sweetened condensed milk for frostings. In addition, we are using cake and pudding mixes, dehydrated soups and more powdered and evaporated milk.



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## AUDIO-VISUAL AIDS

# Americanizing with Displays

MAUDE E. AITON

Administrative Principal  
Americanization Work  
Webster School  
Washington, D. C.

**V**ISUAL aid materials used in the Americanization work of the District of Columbia public schools are best presented in terms of goals, specific problems and an evaluation of materials used.

Every citizenship class aims to help men and women to understand the basic principles of democratic government and to relate form, function and governmental procedure to these principles. The goal for the student is naturalization. The teacher's first problem is so to condition the classroom that the student at all times is feeling and living democracy—thus learning through his own activity to understand democracy.

To live democracy teachers must first clarify principles of government for themselves. The federal textbook on citizenship "Our Constitution and Government," published by the Immigration and Naturalization Service, Department of Justice, is an outstanding example of chart work that assists teachers and students alike to classify basic concepts.

### Changing Mental Concepts

Probably the greatest problem of Americanization teachers is understanding the mental concepts already set in students' minds. In older persons these concepts are often difficult to change. Some teachers, however, seem to be able to take the everyday community happenings understood by persons with meager experience and ferret out the basic features of government that they illustrate or else they create a school situation that furnishes living illustrations of principles involved in government.

Collection of materials that a class may supply for itself is probably of the greatest value. Here each student is both a participant and teacher if he can tell something about his contribution and what it means. Visual aid material is everywhere. Newspaper picture supplements,

magazines and many advertisements are excellent sources.

The teacher's responsibility is to relate the news item to a principle of government. For example, a transport, in picture, belongs to the Navy, an executive department of the government provided for by the constitution for the protection of the people of the United States. This year there has been an especially large collection of the Bicentennial Committee's posters. These are beautiful and can make vital events in history live again when well interpreted by teachers and students.

### Initiative in Projects

Reading and writing are necessary citizenship skills. Many charts are used, made from such familiar everyday sights as grocery, drugstore and street signs. These are especially valuable in rationing situations and are collected by students and teachers. Some simple posters made by the students themselves are described. These are an aid in interpreting the place of each person in the total war effort.

1. A red satin V on white silk, appliquéd, with crossed American flags below.
2. Poster sketches of a pan pouring fat into a wide-mouthed can; rubber being carted away; kitchen patriotism in small illustrations of cans and various foods; different kinds of scrap in semihumorous cartoons.
3. Red Cross nurse.
4. Snapshot of student "cooking for victory."
5. Health posters:  
"I study first aid."  
"We take home nursing."  
"Nutrition classes are our contribution."

6. Picture of an air raid warden, in this case the student's son, with the inscription: "I do my part in Civilian Defense."
7. Picture of student's two sons—two stars—in the armed forces, "I gave two sons."
8. A mosaic of student's contributions, suggested by the cover of an O.C.D. pamphlet. "I share my car. I gave my blood. I mend our clothes. I save fats. I save old rubber. I knit for the Red Cross. I buy bonds."
9. Picture of an Army chapel with devout, uplifted faces entitled: "I pray every day for lasting peace." This contained signatures of persons of all denominations and religions.
10. War Calls Come First. I talk less by telephone.

### On Mounted Display

For one display students brought old magazines; teachers contributed some selected pictures of subjects of students' choice. Cardboard, 22 by 28 inches, was used for mounting the following:

1. Large central sign made in red, white and blue crayon with red and white border.
2. Pictures of sons in U. S. armed services entitled: "I gave my sons."
3. Picture of student's war activities. "I work in Civilian Defense as an Air Raid Warden."
4. Room slogan proposed by student: "This is the Place of Victory."
5. Picture of Gandhi entitled: "Is He Helping?" This was provocative of discussion for developing ideas of what does and does not help.
6. Box for keys, scissors or other materials labeled: "Keys to Victory."
7. Picture captioned: "He sighted sub; sank same." We can't all

# Can Colleges Teach Twice As Much?

**E**DUCATORS, too, are looking to the future. The progressive men and women who teach in America's schools and colleges are planning now for increased efficiency in educational processes. They know that more, much more, must be taught without taking additional productive years from the student's life.

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sink subs, drive tanks or fly bombers but we can all help to win the war.

8. A V-mail sample. "I write V-mail to my sons and to other soldiers we know overseas."
9. Pictures of stamps into cartridges. "I urge everybody I know to buy all the bonds and stamps they possibly can."
10. A picture that helped clothing classes and Red Cross sewing entitled: "I make over clothes for my family and for the Red Cross. I knit. I roll bandages."
11. Picture of D. C. workers carrying lunches. "I put up nourishing lunches."

The visual education department of the public schools has been of great aid in providing general information for citizenship, history and health classes. For adult classes much preparation is necessary prior to running films for the students. Recalls are important and many times a second showing is of great value.

All objective material which helps an individual to gain a clear concept

of democratic principles and procedure in government is of value but that which makes material of real worth is the ability of the teacher to make her work a constant demonstration of democracy in action.

## SCHOOL FILMS

More film suggestions from the Department of Library and Visual Aids, Newark, N. J., are given.

For the address of your nearest depository write to the *Coordinator of Inter-American Affairs, 444 Madison Avenue, New York City, or the Office of War Information, Bureau of Motion Pictures, Washington, D. C.*

**MAKING ENDS MEET**—16 mm. sound. 1 reel. 11 minutes. For home economics classes, grades 7 to 12, high school science classes, college students, parent-teacher groups, O.C.D. classes and living costs committees. *New Jersey State Museum.*

The film uses youngsters in the school cafeteria as a means of showing that price is not always an index of food value. In addition, a mother shows her plan of checking supplies and making menus for a week ahead before she goes shopping. A third part shows girls in the home economics class demonstrating budget extending dishes.

**AIRPLANE CHANGES OUR WORLD MAP**—16 mm. sound. 11 minutes. For science, social studies, sociology and economics classes, grades 9 to 12. Also for adults and college students. *Erpi Classroom Films.*

The picture traces the influence of methods of transportation, especially the airplane, on maps and explains why flat maps are never an accurate representation of the entire earth and why the pole centered map is the best indication of relationships in this air age.

**INDUSTRIAL REVOLUTION**—16 mm. sound. 11 minutes. For classes in social studies, grades 5 to 12. *Erpi Classroom Films.*

Methods of work and production from the time of the first steam-powered loom to the diesel electric-powered streamlined train are compared.

**PIONEERS OF THE PLAINS**—16 mm. sound. 10 minutes. For classes in social studies, grades 5 to 12. *Erpi Classroom Films.*

In 1870 the Carter family, American pioneers, traveled westward from Illinois to the new frontier. The hardships and solitude of their simple life are depicted and the necessity for co-operation is emphasized.



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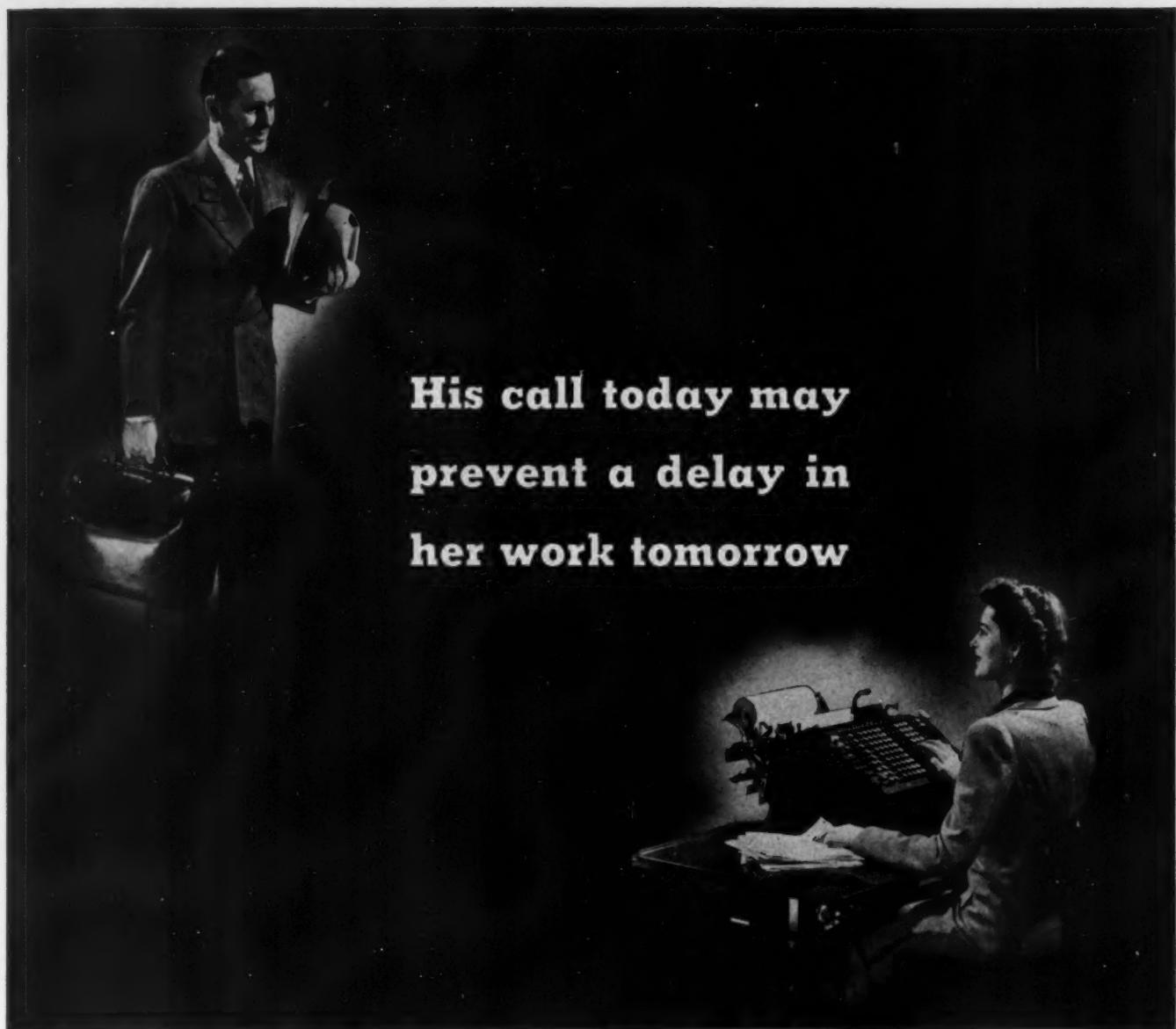


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# CHALK DUST

## Question of the Month—

*Should public school systems extend their programs to include pre-primary children (3 and 4 year olds)?*

*Should public school systems extend their programs to include the 13th and 14th year, sometimes called the Junior College?\**

These two questions will be answered in the August issues of **The NATION'S SCHOOLS**.

Each month, **The NATION'S SCHOOLS** seeks a nation-wide cross-section of opinion of school administrative officers on a controversial subject of current importance. The findings are reported in the editorial pages of each issue.

\*The two questions above have been selected for the August School Opinion Poll.

... *Don't miss your copy of  
The NATION'S  
SCHOOLS*

### Superintendent's Diary

**July 1:** Everdina says flatly that I had better take a vacation and take it mighty quick before the lid blows off. It seems that today I got my census cards all mixed up with the rationing cards for which I am responsible and instead of the usual welcoming letter to new kindergarteners, I sent each youngster a coupon good for 2 extra pounds of coffee and a letter urging him to cut his consumption on cigarettes.

Then, in my capacity as chairman of the multitudinous community drives which are all going on at once, I spoke this afternoon before the Women's Club which has been making heroic efforts to gather books for the boys in the service. I got my drives mixed up and thanked the women enthusiastically for the junk they had contributed.

My final appearance before the Parent-Teacher Association was somewhat marred by the fact that I suggested that it was particularly well qualified to re-double the annual production of onions and cauliflower the coming year.

**July 5:** The rumor has spread around town that I am thinking of taking a vacation. The town is completely divided over the news. Group 1 of the Taxpayers' Association has taken the stand that I am not about to have a nervous breakdown and that my shell-shocked appearance is not due to lack of rest but is congenital. Group 2 argues that I do not need any rest because I have not been in the school building over twice the past year but have frittered my time as chairman of the draft board when I should have been at the Red Cross. The issue, however, seems to be settled by Group 3 which has told my wife that they would make it worth my while to get out of town and stay out.

**July 10:** Today I interviewed the president of the local bank relative to the possibility of obtaining a loan to finance my vacation. The president tactfully pointed out that the bank had not finished its financing of my last trip and would be loath to take on new obligations. Meanwhile, the wife respectfully approached our garbage man whose income and social status are somewhat above ours in the community. He consented to a loan, stating that he had more than he knew what to do with.

**July 15:** Left town for vacation. Had driven only about half a coupon when I was overtaken by a courier stating

that the coal ordered for the school last October had just arrived and there were no janitors left to unload it. I returned home forthwith to process the coal.

**July 17:** Still sore and lame from processing. Left town secretly for vacation. Not 2 miles out I was halted by a message broadcast to the state police to pick me up at all costs. The police informed me that my last four teachers had just resigned to join the military services.

**July 18:** Resolving to teach all four positions myself, I continued merrily on my way. The car seems to be falling apart, having been driven more than the ten years I customarily allow. Two tires just blew. Garage man informs me that my credit card for gasoline and battery has been canceled. What shall I do? To whom may I turn? Where shall I go?

**July (later):** Just received telegram from the board of education telling me where to go but providing no funds wherewith to get there.

### Moral for the Month

*"In the course of my supervisory duties this morning," writes one of Chalk Dust's correspondents, "I wandered into a third grade where the children were engaged in 'creative' art, i.e. drawing whatever they felt like drawing.*

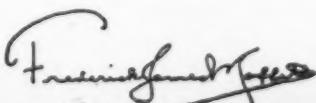
*"One little chap was bending over his desk in so serious a manner that I stopped to examine his work. He was completing a portrait of 'Man Holding an Infant.'*

*"'What may this be, my little man?' quoth I, in my nicest voice-to-children manner.*

*"'Well, you see,' answered the young artist, 'our principal had a new baby last week and I am drawing a picture of him and the baby.'*

*"I looked more closely. Around the head of the principal was a well-defined halo done in approved medieval style.*

*"Maybe, Fred, it was just absent-minded doodling on the part of that kid or maybe there is a moral here somewhere you can find for your readers."*



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# NEWS IN REVIEW

## More Pay for Teachers

To keep teachers on the teaching front, 18 states have voted increases in salaries for 1943-44, state departments of public instruction report. Harry N. Rosenfield, on page 31, lists other states in which legislatures are or have been considering increases. The 18 states and the percentage of raises voted are as follows:

### PERCENTAGE OF INCREASE

STATES	ELE.	H. S.
Ala.	10	10
Del.	6-10	6-10
Fla.	0-20	0-20
Ind.	25	20
Iowa	17	12
Kan.	20-25	15
Ky.	8	8
La.	10	10 <sup>1/3</sup>
Mich.	10-15	10-15
Minn.	10	10-20
N. D.	15-25	15-25
Ore.	15	10
Tex.	12	12
Vt.	20	20
Va.	20	20
Wash.	15	15
W. Va.	15 <sup>1/2</sup>	15 <sup>1/2</sup>
Wyo.	7-20	7-20

## Teacher Shortage Grows

Additional replacements will have to be found in 1943-44 for about 75,000 teachers, most of whom will have to be women, according to a recent summary of the teacher shortage by O.W.I.

Some 65,000 men and women left teaching during the school year just closed for causes related to the war, 39,000 to enter the armed forces and 26,000 to take jobs in war industry or other private employment.

These teachers have been replaced, in part, by issuing 37,000 emergency teaching certificates to persons not fully meeting requirements, rehiring retired or married teachers, increasing class size, curtailing school programs and even closing down some schools.

In spite of the foregoing measures the states reported a shortage of 13,000 teachers in elementary and high schools during 1942-43.

Although not confined to any one section, the situation is most acute in areas in which salaries are lowest and in war production centers.

Four avenues are open to fill these gaps, according to O.W.I.: (1) inducing retired teachers to return, some of them for part-time service; (2) reemploying married women forced to retire by school board rules; (3) issuing emergency certificates to women with experi-

ence in fields related to teaching or women with outstanding technical experience; (4) issuing emergency certificates to many who can qualify in some way.

## May Reorganize Catholic Schools

The reorganization of the American Catholic school system came under discussion at a recent meeting of a special committee of the National Catholic Educational Association held in New York City. Although the committee was organized only to study the situation and make recommendations, this marks a primary step in a project that has been under discussion since 1889.

## Children Need Not Salute

Expelling children from school or punishing them otherwise for not saluting the flag of the United States is a violation of the Bill of Rights. The U. S. Supreme Court recently reversed its previous decision in the Jehovah's Witnesses' "flag salute case."

## Court Upholds Reorganization

The constitutionality of the school district reorganization act has been unanimously sustained by the supreme court of the state of Washington. This favorable decision is expected to stimulate the reorganization of the extravagant and antiquated district system into districts based on the natural community or trade area.

## Attacks Juvenile Delinquency

The board of education of the District of Columbia approved on June 3 a three-way duration program to help counteract the war-time problem of juvenile delinquency among junior high school pupils.

Acting Superintendent Robert L. Haycock was authorized to appoint a school committee of faculty members and an advisory committee composed of civic and social agency representatives to study the situation and recommend procedures for correction.

A subcommittee on juvenile delinquency of the Federation of Citizens' Associations recommended that the commissioners appoint a coordinating council for a continuous course of action to handle problems related to juvenile delinquency.

The committee, headed by M. Virginia O'Neil, suggested four additional steps:

- That every effort be made to make parents feel that their responsibility in maintaining wholesome contacts with their children is a significant war effort.

- That recreational facilities be expanded and that a survey be made to see if certain streets could be closed off for community games and dances.

- That more psychiatric service be made available for children in order that emotional disturbances be treated before the pattern of delinquency be fixed.

- That plans include opportunities to do some useful work which will give young people responsibility needful for maturity and a sense of being valuable in the community and important in the war effort.

## Playgrounds Used Till Bedtime

All the schools at Milledgeville, Ga., have turned over their playgrounds for out-of-school use by the children. Teachers divide the responsibility of supervising the play.

## Preschool Teaching Requirements

Data on certification received from 10 states indicate great variety in specific requirements for preschool certification, an official at the U. S. Office of Education said in an interview June 9.

To anyone holding a valid state certificate upon completion of a two weeks' nursery school course, Florida grants a war-time provisional certificate for teaching in preschool. Washington grants such certification upon completion of a nursery school short course consisting of forty-five class hours of instruction and observation. New Hampshire requires nine hours of specified work in nursery school; Oregon, 15 quarter hours.

## Keeps Children Until 7 p.m.

A center for school-age children of working mothers is operating at Hutchins School, Detroit, on an experimental basis. From 30 to 40 children are cared for. Parents call for their children at 7 p.m.

A large gymnasium provides space for active after-school games. The art room is the scene of hobby work and the foods laboratory provides space for preparing and serving meals. The Merrill-Palmer School has taken an active interest in the project and has contributed materials and equipment.

## New Course for Doctorate

New at the University of Pennsylvania is the award of the degree of Doctor of Education. Twenty-two students have been admitted to a program of study leading to that degree.

## Navy Takes Junior College

The Navy has taken over Wright Junior College in Chicago for use as a pre-radio school. Surprised students arrived for classes on June 15 to find Navy Guards barring the doors and directing them to another junior college to continue their studies.

## WASHINGTON NEWS

### New Child Care Bill

Hearings were held on June 8 on the Thomas Bill (S. 1130) which would remove the war-time child care program from the Federal Works Agency, which has been financing it under Lanham Act funds, and would substitute a much smaller program under the control of the Children's Bureau, the U. S. Office of Education and the Federal Security Agency.

The bill provides for an appropriation of \$1,500,000 for the year ending June 30, 1943, and an annual appropriation of \$20,000,000 for each year thereafter until six months after the war is ended.

Supporters of the bill made the point that the nation's child care program should be in the hands of agencies long established for this purpose rather than under the control of a "building agency" and that Lanham Act grants are slow in coming and confused in administration.

Dr. Martha Eliot of the Children's Bureau declared that under the Thomas Bill the entire program could be put into effect within a few months after its passage. The A.F. of L. and the C.I.O. are supporting the bill.

In defending the F.W.A.'s record, Florence Kerr testified that the program, if continued under Lanham Act funds, will care for 1,000,000 children of working mothers within the next twelve months.

The Thomas Bill requires that state public welfare agencies submit plans for day care services to the Children's Bureau and that state education agencies submit plans for extended school services to the Office of Education. The F.S.A. would coordinate policies and procedures. Proposed funds would be available through established channels of federal-state-local relationship. The federal government would pay half the costs of the program to the state.

### War Nurseries Grow

F.W.A. assistance toward the establishment of 2932 war nurseries and child care centers for 157,822 children had been granted by June 12, according to Florence Kerr, director of F.W.A. war public services. The war nurseries care for children between 2 and 5 years old and the child care centers provide supervision and guidance to children from 6 to 14 before and after school.

### Reagent Chemicals Only

Order P-135, amended April 21, permits educational laboratories to purchase full annual requirements of *reagent chemicals* in one lot. The italicized phrase was omitted last month.

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### Conversion Table for W.P.B. Forms

Subject	Present Number	W.P.B. Number
Blanket priorities and project rating: application.	PD-200	617
Boilers.	PD-665	1790
Cast-iron boilers, low pressure.	PD-639	1510
Civilian use, essential: application.	PD-1A	541
Commercial cooking equipment.	PD-638; 638A	1509; 1529
Commercial dishwashers.	PD-638A	1529
Floor maintenance machines: application to purchase.	PD-722	1843
Fluorescent lamp bases: manufacturers' and reclaimers' allocation application.	PD-532	1200
Laboratory equipment: application for its use.	PD-620	1414
Mechanical refrigerators: application to purchase.	PD-427	882
Office machinery, used: application to acquire.	PD-688	1688
Stokers: application to purchase.	PD-668	1612



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### W.P.B. Renumbers Forms

The War Production Board is renumbering all its PD and UF forms and letters into a single W.P.B. series, also some of the CMP forms and letters. Both the old and new numbers will be carried on the form for four months.

The accompanying conversion table gives the new numbers of some of the commoner items purchased by schools.

### PD Form Simplified

A much simpler form than PD-200 for school projects costing less than \$10,000 in which federal funds are not involved may now be filed with W.P.B. district offices. It is form PD-200-c. Either form may be used.

### W.P.B. Closes 23 Offices

To save money and personnel, 23 of the 123 district offices of W.P.B. closed on June 15. Business formerly carried on in these offices will be handled by other district offices in the states involved.

The offices closed are as follows: *Alabama*, Mobile; *Arkansas*, Fort Smith; *California*, Fresno and Oakland; *Florida*, Miami; *Louisiana*, Shreveport; *Michigan*, Iron Mountain; *Massachusetts*, Fall River, Lowell and New Bedford; *New Jersey*, Camden; *Pennsylvania*, Chester, Lancaster, Johnstown, Norristown, Reading, Wilkes-Barre, Williamsport and York; *South Carolina*, Greenville; *Tennessee*, Chattanooga; *Virginia*, Roanoke; *West Virginia*, Wheeling.

### When Purchasing Film

The War Production Board now limits the use of preference ratings for purchase of film to those assigned on forms PD-1A, PD-3A, PD-25A, PD-25F and PD-870. To be valid, ratings assigned on these forms must be AA-5 or higher.

The amendment to L-233 cancels all ratings for the purchase of film, including those outstanding, that have not been assigned through one of the specified forms. In particular, ratings procured under CMP Regulations 5 and 5A are no longer valid for the purchase of film.

### Maintenance Regulation Explained

Interpretations of the provisions of CMP Regulation No. 5 are applicable to corresponding provisions of Regulation No. 5A, it is made clear in Interpretation 1 of the latter regulation recently announced. Both regulations have to do with the purchase of maintenance, repair and operating supplies.

Regulation No. 5 covers the use of preference ratings and allotment numbers and symbols by industry for these purposes, while 5A does the same in the field of government agencies and public and private institutions, such as schools and colleges.

While in most cases the provisions of the two regulations are similar, there are several important differences, an official of the schools and colleges section, W.P.B., pointed out in an interview June 8. Schools should exercise care, he said, to see that in applying interpretations of Regulation 5 to Regulation 5A they do so only if the provisions of the two regulations correspond in substance.

#### Hopes to Standardize Art Colors

A proposed commercial standard for color materials for art education in schools has been worked out by the division of trade standards, U. S. Department of Commerce. Art teachers or others having occasion to use any of the materials covered by the proposed standard are asked to send comments on the standard to the National Bureau of Standards, Washington, D. C. The purpose is to prevent waste and to provide purchasers with a convenient means of specifying materials.

#### National High School Art Show

A national exhibition of public high school graphic material on war themes, executed during the school year 1942-43, was opened at the Library of Congress in Washington, June 15, under the sponsorship of the U. S. Office of Education, the Library of Congress and O.W.I.

On exhibit are various graphic mediums, including paintings, prints, posters and photographs. Some 550 items have been picked from all over the United States by juries selected by the four regional arts associations by the art department of the N.E.A. and by the committee on art in American education and society.

High school art has already made a real contribution to the war by (1) providing murals for the U.S.O.; (2) supplying art work for civilian defense, for Army camps and canteens; (3) supplying entertainment maps for soldiers; (4) urging scrap collection, and (5) doing camouflage work.

#### Re Stoves and Pencil Sharpeners

The priorities section of the National School Service Institute, on June 8, announced that stoves especially designed for schoolroom use may be shipped from point to point within the United States. Ration Order No. 9 prevents such shipments of domestic heaters.

From the same source comes a plea to schoolmen to write for repair parts for pencil sharpeners to the Consumers Durable Goods Branch, Attention of G. W. Nachtrieb, Jefferson High School Building, Virginia and Sixth Streets, Washington, D. C. Each letter must be original, says N.S.S.I.; two or more identical letters will hurt not help the cause.

## SUMMER COURSES

#### For School Health Workers

To meet war-time needs in health education, Teachers College, Columbia University, has arranged a series of courses for workers in this field extending from July 6 to August 13, with a special conference featuring national leaders in education, medicine, public health and nursing on July 16 and 17.

An intercultural education workshop is also scheduled for this summer ses-

sion, giving attention to Japanese-American relocation, Spanish-American neighbors, Negro discrimination and tolerance toward Jews. Dr. Stewart G. Cole is the leader.

#### Summer Study on Alcoholism

A six week summer session dealing with the consequences of alcoholism will be offered at the School of Alcohol Studies at Yale University.

In session from July 8 to August 18, the course will be directed by Dr. E. M. Jellinek of the Yale Laboratory of Applied Physiology. The purpose of this



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school is to educate community leaders by giving them thorough grounding in scientific knowledge about alcoholic problems.

#### Child Care Conference Scheduled

A conference on planning for the care of children in war time will be held at the University of Chicago, July 5 to 10, under the sponsorship of the university, the Office of Education, the Chicago Office of Civilian Defense, the Chicago Council of Social Agencies, the Elizabeth McCormick Memorial Fund and the Great Lakes division of the Association for Childhood Education.

## INSTRUCTION

#### New Centers at Columbia

To handle immediate postwar problems in American education, Teachers College, Columbia University, is planning to organize five service centers for International Education, Veterans' Education, Rehabilitation, Welfare and Education of Out-of-School Adults and Community Service. The proposed centers will prepare students and educators for an active part in postwar work and in teaching others how to coordinate their efforts for the best results.

#### Safety Awards to Chicago, Detroit

Chicago and Detroit tied for first place in the fourth National Pedestrian Protection Contest sponsored by the American Automobile Association.

Active school safety patrols are part of each of the 596 elementary and junior high schools in Chicago. There is one patrol member for each 236 pupils enrolled. A minimum of thirty minutes per week is devoted to safety instruction, and all of the city's 134 senior high schools offer courses in traffic safety.

In Detroit, 314 of the 326 elementary and junior high schools have active safety patrols with one patrol member for each 222 members. At least thirty minutes per week is devoted to safety instruction in each classroom. Each of the city's 53 high schools offers credit courses in traffic safety.

A unique feature of Detroit's program was the sending of pedestrian safety messages to parents by means of the school children.

#### Custodians Attend Class

Thirteen one-day schools for custodians were held during the month of June in various cities and towns in Iowa. An article on "Draft Regulators" appears in the Iowa Custodians' News Letter for May-June and is particularly recommended for custodians by the state department of education.

#### Test Pupils for Life Work

Thirty thousand Illinois high school pupils are being tested by the University of Illinois high school testing bureau in an effort to help them look beyond the war to select their life work and decide upon necessary educational qualifications.

Twenty-nine colleges and universities throughout the state share a part of the testing cost and each receives a complete report of the examinations.

#### Iceland Gives Scholarships

The University of Iceland has extended scholarships to 20 members of the United States Army as a gesture of friendship to this country and its forces guarding the "Gibraltar of the North Atlantic," according to a dispatch received by the Office of War Information from its outposts in Reykjavik. Specially prepared courses in the Icelandic language are being given the Americans.

#### Dictaphone Scholarships Available

To relieve the shortage of trained office machine operators, the Dictaphone Corporation has organized training available for senior high school pupils. Pupils who were graduated in June may apply for educational and interview tests provided by the corporation. Those who pass are awarded the Dictaphone Wartime Scholarship and are given training

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in transcription. The local or near-by Dictaphone employment manager will provide details.

#### Pupils, Parents Learn War Buying

Pupils and parents are learning to buy under rationing at the Douglass-Simmons School, a Negro elementary school in one of the lowest income areas in Washington, D. C.

In this store project shelves are supplied with empty labeled cans, with bottles painted to look like the "real thing," with packages of coffee, sugar and flour (commercial wrappers filled with sawdust) and with painted replicas of fresh vegetables. Point value and price ceiling charts are placed so that they are easily read.

The principal of the school organized the store for training purposes after discovering that a local grocer had taken an excessive number of blue ration stamps from one pupil's mother.

#### Student Teachers, New Style

Student teachers at the high school level at Northern Illinois State Teachers College must now live in an off-campus situation for a period of twelve weeks, according to a new plan.

During this three months' period they attend the local high school full time and are under the supervision of a "training teacher" in that school. The student pays his own expenses and receives credit toward his degree for the work.

Outstanding schools and excellent teachers are being selected to handle the student teachers. These "training teachers" must all have a master's degree in the subject they teach and must take a short course on the Teachers College campus in the supervision of student teachers.

#### Chinese Girls Find Reserve Arsenal

Four young Chinese women associated with Ginling College, now in exile and supported by United China Relief, recently made an expedition into the mountains of far western China to destroy an ancient legend. Accidentally, they made geological discoveries that may supply a new arsenal for fighting China.

In search of legendary quantities of rock crystal, the girls climbed to within 2000 feet of the top of the 18,000 foot mountain. They found only a handful of rock crystals but quantities of chalcopyrro-tile, crystals which indicate deposits of copper ore. Another find was vast forests of a species of Betula wood used in airplane and glider construction.

#### Russia Teaches in Spite of War

Interference with Russian education has been kept at a minimum, according to V. P. Potemkin, people's commissar

of education of the U.S.S.R. In the fall of 1941, all schools opened except those in battle zones. Of 78,860 schools, 77,042 completed the term with 7,544,600 of 8,221,000 anticipated pupils attending. Where buildings had been taken over for war purposes, classes were held in two or three shifts both in the daytime and evening.

As Nazi-held territory is freed, schools receive primary attention from Soviet authorities. In the Moscow region, 909 of the 926 schools were fully restored by May 1942. Of the 1220 schools whose work had been interrupted, 889 resumed operations as the Red Army advanced.

## AUDIO-VISUAL AIDS

#### Schools Get Health Recordings

Iowa school superintendents are extending their health programs by means of short recordings of health talks distributed free by the Iowa State Department of Health. The records have a running time of approximately ten minutes and can be played on any electric or combination radio-phonograph.

#### Radio Series on Postwar World

A series of programs on the kind of postwar world we are fighting for has

#### AMAZING FACT No. 1 ABOUT M-D DUSTLESS BRUSH ...



Scientific tests conducted by independent health authorities have proved conclusively that this self-moistening Dustless brush eliminates "more than 97 per cent of the dust from the air as compared with ordinary brushes". At the left are photographic illustrations of two culture plates which graphically show this great difference.

Other exclusive features: No sweeping compound necessary. Metal reservoir in back is filled with kerosene, or Arbitrin, a special sweeping fluid. As the brush sweeps it makes the best kind of sweeping compound out of dust it contacts. The Dustless brush also sweeps faster, saves floors, and lengthens the time between scrubbing, mopping and bleaching. It is built to outlast ordinary brushes two to one. . . . There is a self-moistening Dustless brush for every kind of floor. For further facts and prices write direct to factory: Milwaukee Dustless Brush Company, 528 N. 22nd Street, Milwaukee, 3, Wisconsin.

**Milwaukee Dustless**  
BRUSH COMPANY

been organized by NBC's Inter-American University of the Air. Heard each Saturday from 7 to 7:30 p.m. (EWT) over the N.B.C. network and affiliated stations, the first 13 programs are featuring international problems of postwar readjustment while the second 13 will be devoted to domestic issues.

#### Recordings Available for Schools

One thousand educational recordings are available to schools through the new Clearing House of Educational Recordings sponsored by the New York University Film Library and the American

Council on Education. Recordings include social and economic problems, literature, language, history and science.

#### Film Library Association Formed

A group of schoolmen has just formed the Educational Film Library Association, Inc., after a year of consultation and joint activity by a committee representing 122 university, college and state educational film libraries. L. C. Larson of Indiana University is the association's chairman. The potential aggregate educational film audience is 20,000,000 persons a month, Mr. Larson estimates.

## PUBLICATIONS

#### Guide to Engine Maintenance

Two reports on motor repair methods have been prepared by the Society of Automotive Engineers at the request of O.D.T. Copies of these reports, or of the previous two (on metal coating and fitting pistons to reconditioned cylinders), may be obtained without charge. Requests should be sent to the Vehicle Maintenance Section, Motor Transport Division, Office of Defense Transportation, or to the Office of War Information.

#### Home Nursing Text Out

Olivia Peterson, in charge of Red Cross home nursing, announces publication of a high school edition of the Red Cross home nursing textbook. Just off the press, this edition contains material particularly appealing to teen-age girls. Sections of interest primarily to adults have been omitted and two new chapters have been added, "The Change From Childhood to Maturity" and "Nursing as a Profession." A handbook for the use of instructors and administrators has been prepared to assist nurses, teachers and other school personnel in presenting the material.

#### Where Credit Is Due

Two of the photographs used with the Alfred P. Sloan article, "Teaching Experiments in Better Living," in the June issue should have been credited to *Look*, it is announced with regret.

#### Pamphlet on Rebuilding Europe

A new pamphlet, "Rebuilding Europe—After Victory," is the eighty-first in the series of 10 cent pamphlets issued by the Public Affairs Committee at 30 Rockefeller Plaza, New York City. The committee is an educational nonprofit organization.

#### Popes' Views on Peace

The bishops' committee on the Pope's peace points has brought out "Principles for Peace," selections from papal documents from Leo XIII to Pius XII.

#### Awards in Children's Literature

Awards for outstanding children's literature were given to Elizabeth Janet Gray, who received the Newbery Medal for "Adam of the Road" and Virginia Lee Burton, who received the Caldecott Medal for "The Little House."

Granted annually by the American Library's Association's division of libraries for children, the Newbery Medal goes to the author of the best contribution to children's literature. The Caldecott Medal is given to the artist responsible for the outstanding picture book.

*Thank you, Mr. Graham...  
we knew LEV-L-FLOR would do the job.*

BOARD OF EDUCATION  
CITY OF PERTH AMBOY, N. J.

ARTHUR E. GRAHAM  
SECRETARY AND PURCHASING AGENT

Feb. 2nd, 1943

Central Paint & Varnish Works,  
63 Prospect St.,  
Brooklyn, N. Y.

Gentlemen:

Owing to the improper pitch of the concrete floor problem in eliminating the pools of water that would not run into the drains.

Your representative called on us and explained how Lev L Flor could best solve our problem. We gave it a chance and we are indeed thankful to you for the wonderful job it did. Our shower room of 12000 sq. ft. is in perfect condition now. We also leveled our slate steps with this material and repaired many broken parts of our concrete floors.

We shall be glad to recommend Lev L Flor should any inquiries be addressed to us.

Yours very truly,  
*Arthur E. Graham*  
Secretary

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## NAMES IN NEWS

### Superintendents

Clarence E. Zorger, former principal of William Penn High School, Harrisburg, Pa., has been named superintendent. Harry DeWire succeeds him as principal.

E. Perley Eaton of the superintendency union comprising the towns of Berkley, Freetown, Dighton and Gosnold, Mass., has resigned to accept a position as superintendent of a union comprising Norfolk, Mills, Medfield and Westwood, Mass.

A. J. Gibson is the new superintendent of schools at Kensington, Kan. He succeeds F. E. Weed, now connected with a dental clinic in Lincoln, Neb.

S. Willard Price has accepted the superintendency at New Britain, Conn. Formerly, Mr. Price was director of the summer session and assistant to the president of Connecticut State College.

Kenneth H. MacFarland is the new superintendent of schools at Rensselaer, N. Y.

Edward V. Cushman, principal of the high school at Sherburne, N. Y., has been appointed superintendent of schools at Amsterdam, N. Y.

John D. Meade, principal of the high school at Petersburg, Va., has been named superintendent, replacing Henry G. Ellis, who resigned recently after twenty years of service.

Harold T. Rand has assumed the duties of superintendent of schools at Rochester, N. H. Formerly, Mr. Rand was principal of the high school at Pittsfield, N. H.

Orville J. Hooker, principal of the high school at Marion, Ind., has been selected as superintendent of city schools. He replaces Elbert E. Day, retired.

R. L. Bedwell has been appointed superintendent of the school system in Hot Springs, Ark. For the last ten years Mr. Bedwell has been professor of education at Mississippi State College for Women.

W. Orville Puckett has been appointed superintendent of schools at Princeton, Ind. He was formerly principal of the high school there.

William O. Nilsen, superintendent of schools at Spring Grove, Minn., has been elected superintendent of schools at Excelsior, Minn. He succeeds J. J. Halverson, recently chosen to head the school at Albert Lea.

Lee Barbee was recently selected superintendent of schools at Asotin, Wash. E. E. Kirkpatrick, former superintendent, has resigned.

Claud L. Dean, W. B. Burks, Pearl Jones, Cleo McCann, Cecil Riddle and Charles Evans, all administrators in the school system at Oklahoma City, Okla.,

will no longer be under contract in that capacity.

A. A. Douglass, assistant superintendent of public instruction and chief of the division of secondary education of the California State Department of Education, has accepted the superintendency of schools at Modesto, Calif.

### Principals

Noble Hendrix, principal of Woodlawn High School in Birmingham, Ala., leaves the city's school system at the close of the current term to become dean of students, a newly created position, at the University of Alabama. Ralph

Martin will be the new principal of Woodlawn.

Thomas A. Dewey, principal of the high school at Zeeland, Mich., has resigned to become director of athletics for the Briggs Corporation, Detroit.

Ray Graham, principal of the Hay-Edwards School at Springfield, Ill., has been appointed assistant to the state superintendent, in which capacity he will serve as director of education of handicapped children.

Henry M. Geiss has been elected principal of West Side Junior High School, Scranton, Pa., succeeding William E. Jameison, who will retire.



**Quiet**

is doubly important in  
today's War-Crowded Schools!

FOR MANY YEARS, the use of Acoustical Materials in schools and colleges has been recognized as making an important contribution to better education by quieting distracting noise and bringing about greater attention to studies on the part of students and teachers alike. Under the increased tempo of today, with accelerated courses—crowded classrooms—extra activities due to the war—the need is greater than ever before.

Johns-Manville Acoustical Ma-

terials provide an economical scientific solution to the noise problem in classrooms, study halls, corridors, gymnasiums, cafeterias and auditoriums. They are attractive in appearance, easy to maintain and can be applied in new or old buildings with little disturbance.

An interesting brochure entitled "Sound Control" contains the full story of J-M Acoustical Materials. For your free copy, write Johns-Manville, 22 East 40th Street, New York 16, New York.

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Pioneers in Sound Control



J-M ACOUSTICAL MATERIALS AND J-M ASPHALT TILE FLOORS ARE HELPING SCHOOLS AND COLLEGES MEET WARTIME CONDITIONS THROUGHOUT THE COUNTRY

James E. Bates, principal of the senior high school at East Providence, R. I., has been elected president of the Rhode Island Secondary-School Principals Association.

Esther M. Roy is the acting principal of the Myrtle Street School in Springfield, Mass. Carroll W. Robinson was named acting principal of Chestnut Street Junior High School in the same city.

Robert Kristeller, vice principal of the high school at Carmel, N. Y., will become principal at the beginning of the new school year. He succeeds M. C. Fischer, who served as principal for twenty-six years.

Henry E. Cottle has retired from the high school principalship at Bristol, Conn., after thirty-eight years of service in the city's schools.

Addison B. Craig, principal of the high school at Mansfield, Mass., has been commissioned lieutenant, junior grade, in the U. S. Naval Reserve.

T. R. Ehrhorn, assistant principal of Central High School in Sioux City, Iowa, is the new principal of East High School in that city. He succeeds H. A. Arnold, who is retiring.

Anna E. Lawson, principal of Junior High School 81, New York City, has been elected president of the Junior High School Principals' Association.

#### Miscellaneous

John J. Seidel, assistant superintendent for vocational education in Maryland, has been appointed executive assistant in the vocational division of the U. S. Office of Education.

#### In the Colleges

Arthur John Holden has been appointed associate professor of education at Middlebury College. For the last seven years Mr. Holden has been superintendent of schools in the central district of Caledonia County, Vermont.

Arthur W. Ferguson, superintendent of schools in York, Pa., has been named president of Millersville State Teachers College, subject to the approval of Gov. Edward Martin.

Frank Cody, formerly superintendent of Detroit schools and president emeritus of Wayne University, has been awarded the honorary degree of Doctor of Laws by Wayne University.

Chris A. De Young, head of the education department at University of Illinois State Normal University, Normal, Ill., is the new dean of that institution, replacing H. H. Schroeder who is retiring.

A. J. Foy Cross, director of the Central Washington College of Education and formerly director of instruction for the Omaha public schools, has been com-

missioned a lieutenant, junior grade, in the U. S. Naval Reserve. Donald Thompson of the college of education has been appointed acting director for the duration.

#### Private Schools

Mrs. William T. Hodges has been elected principal of Stuart Hall, Staunton, Va. She succeeds Ophelia S. T. Carr.

Mae P. Burns, vice principal of Hawes Hall and Simonds Schools in South Boston, Mass., has been transferred to a similar position at the William Howard Taft Elementary School, Brighton, Mass.

Mrs. Aileen Robinson, former head of the lower school at North Shore Country Day School, Winnetka, Ill., is the new principal of Edgewood School, Scarsdale, N. Y.

#### Deaths

Z. Willis Kemp, former principal of the Sanborn Seminary at Kingston, N. H., died recently at the age of 86.

William Floyd Barnum, for the last twenty-seven years principal of the high school in Santa Monica, Calif., died recently of a heart attack.

George Covey, district superintendent of schools of the third supervisory district, New York State, for the years 1911 to 1942, has died.

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Table

An Unusual Buy

At last! Science equipment that can be used for any of the sciences. You save because one All-Purpose equipped room does the work of three or four rooms. All-Purpose equipment gives you extra service because it can be used several periods a day. You save, too, because quantity production and simplified design result in new, low costs. Write for details.

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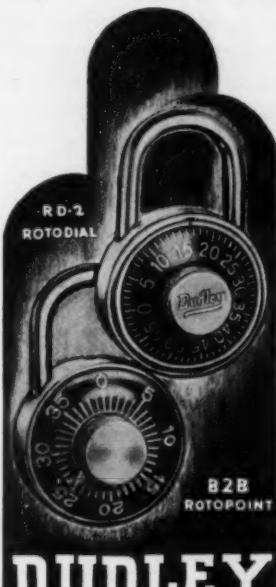
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# A LOCK YOU CAN LEAVE ALONE AND TRUST . . . DUDLEY!



Many parents of children now happy in the possession of Dudley locks on their lockers, had Dudley locks themselves as school children.

That's one of the prized qualities of Dudley locker locks. They have proved themselves through the years as completely dependable.

Besides those shown here the Dudley line includes locks for every school need, both built-in and master-keyed combination padlocks. Write for complete information. These locks are still being made and can be supplied on proper priorities.

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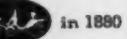
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A SIT-DOWN STRIKE  
SINCE WE PUT IN  
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Single Fold, Double Fold, or Black Core—for high quality at low cost. The Victoria Paper Mills Company, Fulton, New York.

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# Surprised at the Way They've Lasted?

Many school and college executives have expressed amazement at the way their WAYNE Grandstands and Gymstands have continued in service without requiring repairs of any consequence. Virtually without exception, war-time restrictions on materials for such repairs have created no problem for owners of WAYNE equipment. As a matter of fact, this should *not* be surprising, because strength and durability are characteristics that have contributed importantly to WAYNE'S Nationwide acceptance for a quarter of a century.



Wayne Type H Grandstand



Wayne Rolling Gymstand

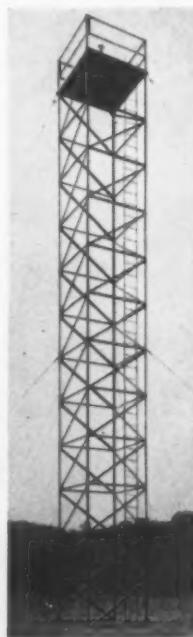
The WAYNE stands illustrated here are well-known to schools, colleges and institutions throughout the country. They are designed and built to the highest standards of engineering practice, and incorporate exclusive features that insure *extra* value through longer, more efficient and economical service. Back of every WAYNE Grandstand and Gymstand there are years of *specialization* . . . of that quality of experience for which there is no substitute.

When this war is ended, we will again be prepared to supply *all* your grandstand requirements. When that day comes . . . remember WAYNE!

## For the Duration . . .

materials and facilities formerly employed in the building of WAYNE Grandstands and Gymstands are enlisted for the construction of equipment needed by our armed forces. The Fire Control Tower, pictured at the right, is a typical example of the way the *sound principles* of WAYNE grandstand engineering have been adapted to war-time requirements.

**"WAYNE Stands for Safety!"**



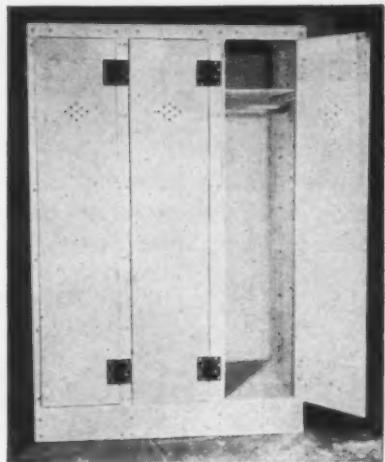
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# WHAT'S NEW

## Custodians Can Make Lockers

Material Answers Metal Shortage

In answer to the metal locker shortage, your plant maintenance men can make lockers with *Careystone Flat Sheathing* (asbestos-cement). This material is produced by combining cement and asbestos fibers under pressure. The result is a stone-like substance which, according to the manufacturer, will not rust, rot or corrode and is fireproof and rodent-proof.



*Careystone Flat Sheathing* is available in sheets 48 by 96 inches. A thickness of  $\frac{3}{8}$  inch is recommended for lockers.—Philip Carey Mfg. Company, Asbestos-Cement Products Department, Lockland, Cincinnati.

- When inquiring, refer to **NS459**

## Slides Show Aeronautics Series

Coordinate Preflight Training

This series of lantern slides aims at coordinating high school preflight training. Twelve units cover all topics dealt with in preflight training in accordance with the program developed by the Civil Aeronautics Administration and the U. S. Office of Education.

An explanatory manual accompanies the series and can be used by teacher and pupils alike, for it is written in simple but technically accurate style.—Daniel Guggenheim School of Aeronautics, New York University, New York City.

- When inquiring, refer to **NS460**

## "Help Troubles" in Your Cafeteria?

Charts Will Train New Employees

Are you having "help troubles" in your cafeteria? Here is a set of five charts to simplify the training of new employees. Time and temperatures tables for most items on daily menus are included.

A *baking chart* explains the correct use of multiple deck and sectional bake ovens and heat controls. The *roasting chart* deals with the cause of meat shrinkage; thus enabling the cook to obtain more servings from meat. A *deep fat frying chart* tells about the care of cooking fat to prevent overheating. Nine extra cups of coffee from each pound can be had—and at a saving of fuel—according to the *chart*.

# for SCHOOLS

on coffee brewing. Correct steam table temperatures and heating guides to reduce operating costs are presented in a *steam table chart*.

Printed in two colors, these charts are available in a 10 by 15 inch size. They are varnished for durability and punched for easy hanging.—Robertshaw Thermostat Co., Youngwood, Pa.

- When inquiring, refer to **NS461**

## Plastic Protects Boilers, Tanks

### Prevents Corrosion and Fungus

Serviron is a permanently plastic material, applied like paint, which protects boiler drums, metal, wood or concrete storage tanks and water-submerged surfaces against corrosion and fungus growths.

As this product stretches and contracts with temperature changes, danger of hairline cracks is eliminated, it is stated. The material will not melt, freeze, crack or peel at temperatures from below freezing to 500 or 550° F.

Odorless and tasteless, Serviron can be used wherever clean rust-free water is required. It withstands certain acids, according to the producer, and can be used to coat valves, ammonia lines and underground pipes and tanks.

For best results, this plastic material is applied directly to the surface without a primer coat.—Saverite Engineering Co., 1067 Clinton Street, Hoboken, N. J.

- When inquiring, refer to **NS462**

## Band Saw With Safety Lock

### Blades Guided by Knob Control

A band saw for wood or plastic stock is now offered in a solid one piece steel structure. For safety purposes the wheel guard swings on a single hinge and must be closed before the machine can operate. Friction holds the telescoping guard on the blade when the lock is released.

A deep throat permits a 27 inch diameter cutting. Strong, light materials in the wheels allow for greater speed and less vibration, it is stated. Newly designed blade guides handle all blades from  $\frac{1}{8}$  to  $\frac{3}{4}$  inch and adjust by a single knob control. A blade tension scale is provided.

The table, 15 by  $15\frac{1}{2}$  inches, is rigidly supported on heavy trunnions and will not sag under heavy cuts. It tilts 45° right and 10° left.—Boice-Crane Company, Central Avenue and Michigan Central R. R., Toledo, Ohio.

- When inquiring, refer to **NS463**

or use Readers' Service blank on page 71

# The acid test OF QUALITY



**T**O DAY there is also another kind of war —a war of endurance between quality products and inferior products. Because of the high quality materials and workmanship in the construction of National Locks, they give that extra service so necessary in today's conservation of vital war materials—yet they cost no more than ordinary locks.

After victory, we will again be able to supply your needs for National Lock quality-built Locker, Laboratory and Vocational Equipment Locks.

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## WHAT'S NEW for SCHOOLS

### Lamp Starter Has Three Year Life

#### Mechanical Features Provide Name

Here is a fluorescent lamp starter with an average rated life of three years under specified test conditions. Called "Watch Dog," its mechanical features did much to provide it with a name, according to the producer.

Precision starting means that the Watch Dog lights the lamp at the right instant, conserving emissive material and prolonging the life of the starter.

Dead lamp lockout makes for close tolerances in the starter's mechanism, thus eliminating blinking and flickering when a lamp burns out. Advantages here, according to the manufacturer, are (a) life of both starter and ballast is prolonged since flickering is hard on both; (b) current that would have been used if the lamp had continued to flicker is conserved, and (c) maintenance time is saved because no cooling or waiting period is required before removing dead lamps.

When a dead lamp is removed, the "Watch Dog" is reset by pressing a button on top of the starter, thus resetting the new lamp.—General Electric Company, 570 Lexington Avenue, New York City.

• When inquiring, refer to NS464

### No Slipping With "Skidproof"

#### Easy to Apply, Dries Quickly

There is no "slip hazard" to be afraid of with Skidproof floor finish. According to the manufacturer, one gallon of the product covers from 2000 to 3000 square feet. It dries in twenty minutes.

For use on tile, cork, rubber, concrete, terrazzo, linoleum, asphalt tile and painted and varnished surfaces, Skidproof leaves a high gloss and is waterproof. Of emulsified plastic, the finish has no odor during or after application and will not affect the most delicate colors. It is applied with a lamb's wool applicator or with a hard cord string mop.—Consolidated Laboratories, Division of Consolidated Chemical Laboratories, Inc., South Vandeventer at Hunt Avenue, St. Louis.

• When inquiring, refer to NS465

### Fluorescent Lighting in Three Models

#### For Use in Vocational Departments

For use in vocational departments, this fluorescent lighting fixture is available now. In brief description, the ballast is completely enclosed; the nonmetallic reflector is anchored to the top-housing with captive latches. Latches release with a quarter-turn, yet lock with strength sufficient to support more than twenty times the weight, it is stated by the manufacturer.

The fixtures come complete, ready for installation, including lamps and starters. They are available for 110 to 125 volts or 220 to 250 volts, 60 cycle A.C.

Model HF-100R uses two 40 watt fluorescent lamps. The over-all length is 49 1/4 inches; width, 13 11/16 inches; height, 6 3/4 inches, and weight, 17 pounds. This model uses 100 watts. This includes lamps and auxiliary units.

Address manufacturers for further information

## WHAT'S NEW for SCHOOLS

Model HF-150R uses three 40 watt fluorescent lamps. The over-all length is 49 $\frac{3}{4}$  inches; width, 13 11/16 inches; height, 6 $\frac{3}{4}$  inches, and weight, 25 pounds. Needed here are 150 watts.

Model HF-235R uses two 100 watt fluorescent lamps. The over-all length is 61 $\frac{1}{2}$  inches; width, 16 $\frac{3}{4}$  inches; height, 8 inches and weight, 31 pounds. This type uses 235 watts.—Sylvania Electric Products, Fluorescent Fixture Division, Ipswich, Mass.

- When inquiring, refer to NS466

## NEW CATALOGS

### Radio Handbook for Pupils, Engineers

Edited by Naval Research Lieutenant



"Allied's Radio Data Handbook" is a condensation of formulas, charts and data commonly used in radio and electronics. The booklet was edited by Lt. Nelson M. Cooke, United States Navy, Naval Research Laboratory, Washington, D. C., and published by the **Allied Radio Corporation, 833 West Jackson Boulevard, Chicago.**

The booklet is an aid to the student learning fundamentals, the engineer seeking a time-saving reference, the serviceman wanting technical data and the experimenter who wants practical information. Four parts include mathematical data, radio and electronic formulas, engineering and servicing and information and a complete set of four-place log and trig tables.

- When inquiring, refer to NS467

### Booklet Offers Apprentice Training

Executives May Write for Copies

Executives of companies or organizations that have apprentice training programs or are contemplating them are invited to write for "Apprentice Training Program," a new 26 page manual published by the **B. F. Goodrich Company, Akron, Ohio.**

To guide students in its apprentice school, this company has organized a booklet explaining the school's purpose, method of selecting students, administration, cooperative plan with the board of education, ratio of apprentices to journeymen and the length of time required to complete the course.

The course of study for each trade is given, both in the classroom and in the shop, with the number of hours required for each.

- When inquiring, refer to NS468

or use Readers' Service blank on page 71

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CAFETERIA EQUIPMENT  
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*It's Welded WEARS*

**3 TO 4 TIMES LONGER!**

The **Finnell Steel-Wool Pad** wears so much longer because it wears evenly. *Welded construction gets all the wear out of all the material!... and prevents tearing and shredding of the pad.* 7 sizes, 4 grades.

For literature or consultation, phone or write nearest **Finnell branch or Finnell System, Inc., 207 East St., Elkhart, Ind.**

**THE 600 SERIES** **Finnell**  
Steel-wool, scrubs, polishes, waxes, burnishes, sands, grinds. 5 sizes. **Feather-Touch Safety Switch.**

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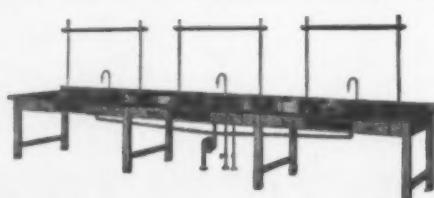
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## WHAT'S NEW for SCHOOLS

### Maintaining Extinguishers

Types of Fires Discussed



Explaining the use and care of fire extinguishers, the new booklet, "Maintenance of First Aid Fire-Fighting Equipment," has just been published by the American-La-France-Foamite Corporation, 903 Erie Street, Elmira, N. Y. The publication is divided into six sections: (1) vaporizing liquid, (2) soda acid, (3) foam, (4) anti-freeze, (5) carbon-dioxide extinguishers and (6) charts giving condensed data as to extinguishers and engine characteristics, methods of operation, capacity and range of steam. Various types of fires, extinguishers and wheeled engines are also illustrated. The booklet is free and will be sent upon request.

• When inquiring, refer to **NS469**

### Booklet Guides War Cooking

Box Lunches Tested

Free for nutritionists, school teachers and their classes, war workers, Red Cross and canteen instructors and agricultural group leaders is a new handbook entitled "A Guide to Wartime Cooking." Published by the H. J. Heinz Company, Pittsburgh, the booklet has been planned for good eating, good nutrition, good economics.

For persons who pack a lunch pail every day, this book will have a special interest, according to the manufacturer. Each lunch box meal was subjected to "pack testing" before being accepted for publication. In the testing, lunches were carefully prepared, wrapped and stored for six hours under factory conditions, then opened and taste-tested by a committee of critics. The results are the down-to-earth meals described in the handbook.

• When inquiring, refer to **NS470**

## FILM RELEASES

Historical Films—16 mm. sound. One reel each. One series deals with the periods in British history which witness the consolidation of Britain, exploration of the new world, successful defense against invasion and the period of Reformation. The second series deals with such famous women as Joan of Arc, Cleopatra, Boadicea, Delilah and the Queen of Sheba.—Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City.

• When inquiring, refer to **NS471**

Address manufacturers for further information

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## WHAT'S NEW for SCHOOLS

Paris Calling—12 reels. Rental, \$17.50. A story of the French "underground." Pictures flight from invading Nazis, escapes from Gestapo agents, a secret radio transmitter and a commando raid.—Bell and Howell Company, 1801-1815 Larchmont Avenue, Chicago.

- When inquiring, refer to **NS472**

Canning the Victory Crop—16 mm. sound. 25 minutes. Full color. Designed to assist people who are doing their own canning. Emphasizes necessary precautions. Has approval of W.P.B., O.C.D. and the National Victory Garden Institute.—Good Housekeeping Magazine, 959 Eighth Avenue, New York City.

- When inquiring, refer to **NS473**



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Bismarck Sea Victory—Shows the destruction of a Jap fleet of 22 ships by land-based American and Australian bombers employing the "skip-bombing" technic.—Castle Films, Inc., 30 Rockefeller Plaza, New York City.

- When inquiring, refer to **NS474**

Yanks Bomb Tokyo—16 mm. sound and titled versions. Depicts the take-off of American flyers from the deck of the *Hornet*. Illustrates the attack upon Japan by Doolittle and his men.—Castle Films, Inc., 30 Rockefeller Plaza, New York City.

- When inquiring, refer to **NS475**

Regional Geography Films—Depict contemporary life in six major regions of the United States. Illustrate the interdependence existing among the six major regions of the country. Portray the United States as a complex of regions.—Erpi Classroom Films, Inc., 1841 Broadway, New York City.

- When inquiring, refer to **NS476**

Wartime Training Films—16 mm. 1 reel. For sale only. A series of films for use in scientific instruction of high school pupils prior to induction into the armed forces.—Erpi Classroom Films, Inc., 1841 Broadway, New York City.

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Sound-on-Film Motion Pictures—Present a variety of films available free or for a small service charge.—Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

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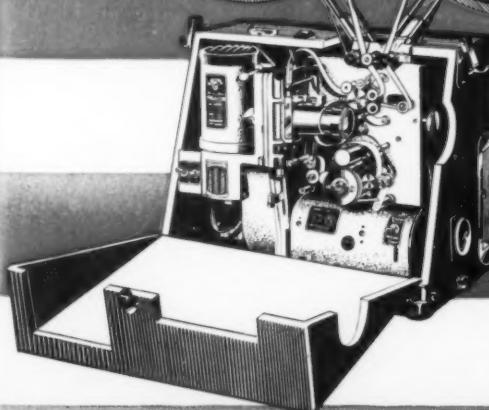
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